

2003

Alcohol Restraint Television Advertisements Targeted At Adolescents : A Three-way Comparison Of Reinforcement Styles On Attitude To The Advertisement, Attitude To The Cause And Attitude To The Act

Neil Robinson
Edith Cowan University

Follow this and additional works at: <https://ro.ecu.edu.au/theses>



Part of the [Communication Commons](#), and the [Marketing Commons](#)

Recommended Citation

Robinson, N. (2003). *Alcohol Restraint Television Advertisements Targeted At Adolescents : A Three-way Comparison Of Reinforcement Styles On Attitude To The Advertisement, Attitude To The Cause And Attitude To The Act*. <https://ro.ecu.edu.au/theses/1501>

This Thesis is posted at Research Online.
<https://ro.ecu.edu.au/theses/1501>

Edith Cowan University

Copyright Warning

You may print or download ONE copy of this document for the purpose of your own research or study.

The University does not authorize you to copy, communicate or otherwise make available electronically to any other person any copyright material contained on this site.

You are reminded of the following:

- Copyright owners are entitled to take legal action against persons who infringe their copyright.
- A reproduction of material that is protected by copyright may be a copyright infringement. Where the reproduction of such material is done without attribution of authorship, with false attribution of authorship or the authorship is treated in a derogatory manner, this may be a breach of the author's moral rights contained in Part IX of the Copyright Act 1968 (Cth).
- Courts have the power to impose a wide range of civil and criminal sanctions for infringement of copyright, infringement of moral rights and other offences under the Copyright Act 1968 (Cth). Higher penalties may apply, and higher damages may be awarded, for offences and infringements involving the conversion of material into digital or electronic form.

Edith Cowan University

School of Marketing, Tourism and Leisure Studies

***Alcohol Restraint Television Advertisements
Targeted at Adolescents: A Three-Way
Comparison of Reinforcement Styles on
Attitude to the Advertisement, Attitude to the
Cause and Attitude to the Act***

Masters Dissertation

Student: Neil Robinson

Number: [REDACTED]

Supervisor: Kate Mizerski

Date: Monday, 15th December, 2003

Use of this Thesis

This copy is the property of Edith Cowan University. However the literature rights of the author must be respected. If any passage from this thesis is quoted or closely paraphrased in a paper or written work prepared by the user, the source of the passage must be acknowledged in the work. If the user desires to publish a paper or written work containing passages copied or closely paraphrased from this thesis, which passages would in total constitute an infringing copy for the purposes of the Copyright Act, he or she must first obtain the written permission of the author to do so.

Abstract

Adolescent binge-drinking is an area of great concern in Australia as it is with many other developed countries around the world. Every year in Australia, Commonwealth and State health authorities invest considerable resources into trying to address this issue and the results have been described as being at best, mixed. Health promotion initiatives such as school programmes, media promotion and health programmes coupled with restrictions on supply of alcohol are all used to try and curb the incidence of adolescent binge drinking. In recent years television advertising has specifically been used to try and curb the incidence of adolescent binge-drinking behaviour.

The aim of this study was to look more closely at the likely effectiveness of those advertising executions that are now commonly used to influence adolescents' attitudes and behaviours toward alcohol. To this end, three advertising executions were presented to 720 Perth school students who were mostly aged between 14-15 years old. The three advertising executions differed in that one was of a positive appeal execution type, one was of a negative advertising execution type, and the other was of a 'combination' negative/positive advertising execution type. After a review of the literature the expectation was that the combination advertising execution would most likely be the most effective advertising executions.

The findings of this study were however, different to expectation. It was found that the negative execution performed similarly or perhaps even marginally better than

the combination execution. In contrast, the positive execution appeared to carry less impact with adolescent audiences suggesting that of the three execution styles it is probably the least effective method for communicating to adolescents about alcohol restraint.

In addition to these investigations into advertising executions other background research was also conducted. This research explored adolescent attitudes toward the whole idea of anti-binge drinking advertising. This area of investigation was thought to be important because marketing theory suggests that advertising requires positive attitudes from it's audiences to work at an optimum level. For example, it has been suggested that a positive attitude toward an advertisement not only makes the audience more receptive but it also makes consumers more approving of the product (or in this case the cause), and more likely to act on the information.

Adolescents were generally found to be concerned about alcohol abuse and seemed to be generally supportive of health promotion initiatives. These finding have therefore been discussed in this dissertation keeping in mind those findings regarding the three advertising executions.

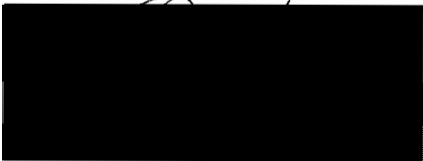
It is believed that studies such as this are of importance to our communities. It is for example, anticipated that the results from such studies have the potential to assist health promotion planners to plan their health promotion strategies more effectively in future. It should be added too, the implications of studies such as these are that health promotion planners will not only be assisted in the future in the area of adolescent binge-drinking but also in other areas of health such as in the areas of illicit drug use, smoking or diet and exercise strategies.

Declaration

I certify that this thesis does not, to the best of my knowledge and belief:

- i) Incorporate without acknowledgment any material previously submitted for a degree or diploma in any institution of higher education;
- ii) Contain any material previously published or written by another person except where due reference is made in the text; or
- iii) Contain any defamatory material.

Masters Candidate



Neil Robinson.

Acknowledgements

Well here it is my Masters dissertation. This body of work represents a prolonged period of study that is finally behind me. I believe that undertaking this Masters programme has been a very worthwhile exercise. It has served to substantially improve my research and academic skills, it has given me a lot more confidence in my work and I feel over the course of this programme I have become more skilled at independent learning and in communicating ideas. I also feel I have been able to improve my general knowledge of marketing.

Perhaps more importantly, I feel the societal focus of the topic that was ultimately chosen for this dissertation has in itself the potential to be worthwhile to the wider community. With this in mind, the experience of doing this dissertation while very protracted, was also very rewarding for me.

Whether they know it or not my learning has been conditional on the support of those people close to me who have supported me throughout the years. In particular I would like to thank Ray Thomas and Sherryl Tanian who have been so supportive despite my continued delays. I would also like to thank my family and friends for their patience and support. I would also like to thank Dr Susan Hill of the graduate centre who was so helpful when I needed guidance with my data analysis and with the presentation of that analysis. Her help has been invaluable. I would like to thank my supervisor Dr Kate Mizerski who steered me through the process and was patient with my delays. I would like to thank the staff of those Perth Senior High Schools who participated so willingly in this study and I would also like to acknowledge the assistance given to me by those lively (but sometimes world wearied) students at those schools I visited. These visits were the fun part!

Finally, I would like to thank my 7 year-old daughter Bianca for setting such a good example for me day in, day out. All that energy and passion for life!

Table of Contents

Chapter One – Introduction

1.0	Background to the Study	1
1.1	Significance of the Study	18
1.2	Purpose of the Study	20
1.3	Research Hypothesis	22
1.4	Conclusion	23

Chapter Two – Review of the Literature, Alcohol and Alcohol Advertising in Australia

2.0	Background on Alcohol in Australia	24
2.1	Alcohol and Adolescents	28
2.2	Adolescent Motivation for Using Alcohol	33
2.3	Adolescents and Advertising	39
2.4	Advertising and Health Promotion Practices to Help Reduce Binge Drinking by Adolescents	49
2.5	Understanding the Design of Health Promotion Communications by Marketers	59
2.6	Operant Conditioning and Binge Drinking Advertising	70
2.7	Marketing of Alcohol and Adolescents: Advertising Practices & Suggested Effects	84
2.8	Summary	93

Chapter Three – Theoretical Framework

3.0	Introduction	95
3.1	The Importance of Liking the Advertisement	97
3.2	Operant Learning and Advertising to Adolescents	102

3.3	Threat Based Advertising and this Study	106
3.4	Summary	109

Chapter Four – Research Methodology

4.0	Introduction	112
4.1	Primary Data Collection	113
4.1.1	<i>Sample & Sample Design</i>	113
4.1.2	<i>Sample Size and Drawing the Sample</i>	116
4.2.3	<i>Ethics and Ethical Measures</i>	127
4.2	The Research Materials and Research Process	130
4.2.1	<i>The Research Stimulus</i>	130
4.2.2	<i>The Questionnaire</i>	136
4.2.3	<i>The Procedure</i>	145
4.2.4	<i>Summary</i>	147

Chapter Five – Preliminary Data Analysis & Hypothesis Testing of the Three Advertising Appeals

5.0	Introduction	148
5.1	Data Analysis	148
5.2	Initial Sample Distributions	149
5.2.1	<i>Age Distribution</i>	149
5.2.2	<i>Gender Distribution and Year of Study</i>	150
5.2.3	<i>School Representation</i>	151
5.2.4	<i>Respondent's Attitudes and Experiences with Alcohol</i>	152
5.2.5	<i>Frequency that Adolescents Drink</i>	158
5.2.6	<i>Usual Alcohol Intake on Each Occasion</i>	160
5.2.7	<i>Respondent's Reasoning for Reducing Alcohol Consumption</i>	164
5.3	Introduction – Hypotheses Testing of the Three Binge Drink Advertising Executions	169
5.4	Statistic Testing	169
5.4.1	<i>The Friedman Test</i>	169
5.4.2	<i>The Wilcoxon Test</i>	170
5.4.3	<i>Bonferroni Adjustment</i>	170
5.4.4	<i>Descriptive Statistics</i>	171

5.5	Hypothesis One	174
5.4	Hypothesis Two	179
5.5	Hypothesis Three	168
5.6	Conclusions	173

Chapter Six – Discussion on the Findings and Further Analysis, Implications, Research Limitations and Further Research

6.0	Introduction	193
6.1	Summary – The ‘Best’ Advertising Execution	194
6.2	Respondents’ General Attitudes Toward Alcohol Restraint Communications	200
6.2.1	<i>Adolescents Generally Support Anti-binge Drinking Communications</i>	202
6.2.2	<i>Respondents’ Level of Support for Health Promotions</i>	204
6.2.3	<i>Respondents’ Personal and Projected Attitudes Toward the ‘Alcohol Restraint Cause’ and its Advertising</i>	206
6.2.4	<i>Adolescent Support or Opposition to Community Initiatives to Reduce Alcohol Misuse</i>	213
6.2.5	<i>Do Adolescents Need to Feel Positively About the Health Promotion Message?</i>	218
6.3	Summary – Adolescents’ Attitudes Toward Alcohol Restraint Communication	226
6.4	Implications for Health Promotion Marketers and Recommendations for Future Research	231
6.5	Limitations of this Study	235

References	241
-------------------	------------

Chapter One - Introduction

1.0 Background to the Study

Binge drinking during adolescence is a major problem in Australian society and in many other societies around the world. In many cases, Australian adolescents drink alcohol too early in life, too often, and to excessive levels (Shanahan & Hewitt, 1999; NHRMC, 2000). Research by Shanahan and Hewitt (1999) suggests the aim of most underage drinkers is to “drink to get drunk, and to get drunk quickly” (p.13). Research by the Health Department of Western Australia has suggested that by age fifteen 11.6 per cent of males and 19.7 per cent of females exceeded the recommended NHMRC guidelines for “safe” adult alcohol intake limits on at least one day in the previous week (Health Promotion Services Western Australia, 1997b). While evidence does also suggest that most adolescents “mature-out” of binge drinking during their mid-to-late twenties or early thirties these drinking patterns in early adolescence remain troubling for health promotion authorities and the Australian community (Quigley & Marlatt, 1996; National Drug Strategy Household Strategy (NDSHS), 2001).

Alcohol misuse by adolescents can create problems for the individual or others through the injuries caused by the alcohol itself, through the accidents it causes, or through intoxicated people being involved in fighting or being the victims of crime (Toomey, Rosenfeld & Wagenaar, 1996). In addition to concerns about physical injuries, social trauma can also occur when people find themselves being sick, arguing with friends and family, participating in unsafe, abusive or unwanted sex and other embarrassing outcomes associated with a loss of personal control (Shanahan & Hewitt, 1999; Health Promotion Services, 1999a). The three leading causes of death among adolescents are unintentional injuries, homicide and suicide and all of these types of teenage fatalities are said to be associated with the use and

misuse of alcohol (National Alcohol Strategy, 2003). Notwithstanding these very tangible negative outcomes that are commonplace when alcohol is misused, adolescents still seem to report that the benefits of alcohol use by far outweigh the disadvantages (Shanahan & Hewitt, 1999).

The misuse of alcohol is demonstrative of one of those situations that Solomon (2002) describes as the *darker side of consumer behaviour*. Solomon (2002) points out that not all consumption is desirable or even rational, suggesting consumer desires, choices, and actions often result in negative consequences to the individual and/or society and sometimes consumers are their own worst enemies. In an effort to address this *dark side consumption*, health promotion marketers are often pressed into action to try and *de-market* undesirable consumption practices. In Australia for example, State, Territory and Commonwealth Governments are active in trying to curb the incidence of binge drinking in various segments of the Australian community. These segments have included: the general population; those 18-25 years old; those 13-17 year olds who are described as being young to middle aged adolescents; and indigenous Australians.

Perhaps one might reasonably expect any research or health initiatives targeting adolescent alcohol restraint would show that adolescents are by their very nature quite ambivalent towards being singled out for attention on this issue. This is because health promotions are after all the product of adult values and mores'. Kleiber and Rickards (1985) point out that at this time of life adolescents are trying to increasingly position themselves within their respective worlds more increasingly as adults rather than children. Evidence suggests adolescents do not usually like to have people in authority telling them how to feel or behave during this time in their lives (Broadbent, 1994, p.33). During the adolescent stage in life, products such as alcohol are thought to take on the role of "social prop" as adolescents assert themselves in the adult world. Jessor and Jessor (1977) for example, suggest adolescents, and especially those who are seeking adulthood and independence, try to achieve this through the imitation of adult-like or adult sanctioned behaviours.

Noe (1969) suggests that during this time, adolescent perceptions see alcohol as a tool that can take on an *instrumental* role in elevating the individual from the adolescent world into the desired adult world.

Alcohol is not only used as a prop to increase the adolescent's feeling of greater maturity but it is also used as a recreational tool suggests Kleiber and Rickards (1985) that can be "intrinsically enjoyable for adolescence as well as a product that can provide opportunities for experimentation" (p.304). In support of the notion of alcohol as social prop, as a tool for providing a sense of identity or as a product that supports recreational pursuits, Sherif and Sherif (1964) comment that:

"Often adolescents seem to feel that adults (teachers and parents) are incapable of understanding them and are nothing but obstacles to their strivings to establish themselves as grown persons in key areas such as relations with the opposite sex, their notions of recreation, their choice of friends, and their pursuit of occupational lines (p.56).

The authors also suggest that during this time, adolescents strive to "break away from the influences and control of the adult world". This is perhaps why this is the time when adolescents often find themselves experimenting and using alcohol and other "adult sanctioned" drugs such as cigarettes (Noe, 1969; Jessor & Jessor, 1979).

In an effort to communicate to adolescent audiences about alcohol misuse, authorities have devised among other things, television campaigns that contain highly targeted health promotion messages that are specific to their intended audiences. The results of these health promotion communications however have been described as being "quite questionable to date"(Munro, 1997, p.2). Since the inception of these health promotion communications it has been acknowledged that the design of these communications targeting school-aged adolescents was going to be a very difficult task (Munro, 1997). Burns and Thompson (1998) suggest that "all marketing communications that are targeted at this media savvy audience would

need to be have integrity, credibility and relevance if they are to have any hope of working” (p.110).

It has been found that by adolescence, young people as consumers have already developed considerable decision making competence (Mann, Harmoni & Power, 1989) and were becoming quite capable of processing advertising communications on their own (Moschis & Moore, 1979). Not only are they competent at processing and interpreting information but research has also suggested that by adolescence they are increasingly sophisticated consumers who have developed a tendency to resist marketing communications. For example, Boush, Friestad and Rose (1994) provided evidence to suggest that marketers are communicating to a group that “are perhaps already about as mistrustful of advertising as they can reasonably be” (p.172). Boush et al. (1994) found that by the time a young person reached their adolescent years they have become less believing of advertising and this level of scepticism increased as they grew older. Other research has presented evidence that suggests that level of scepticism is not only related to age but also is related to an individuals exposure to socialisation agents such as parents, peers and television and it’s advertising (Mangleburg & Bristol, 1998).

Boush, et al. (1994) go on to suggest that adolescents and young adults are difficult to communicate with “because this age group, having grown-up in a ‘marketing society’ tends to be sceptical about attempts to get them to buy things” (p.173). Further to this, research by Carroll (1995) went on to not only suggest that adolescents were quite often cynical towards marketing communications but they were also quite cynical of messages such as those found in health promotion. This was because these communications originated from others outside their world from those who are in authority (Carroll, 1995). Broadbent (1994) made similar observations where it was found that high levels of cynicism exist towards health promotion messages because they were perceived to lack credibility. These findings were based on the research findings that suggested that health promotion messages,

highlighted in the adolescent audiences' mind the double standards that exists. For example, where adults lived under a different set of rules to adolescents where alcohol and other drugs were concerned (1994). Perhaps highlighting the contrasting mindset of adolescents to the "adult" health authority, findings from research by Carroll (1995) suggest "adolescents in reality don't want to be told things, they instead want to discover things for themselves" (p.3). These contrasting mindsets between on the one hand, the health authorities needs to push more appropriate attitudes and behaviours in adolescent toward alcohol consumption and on the other hand, adolescents' need to "discover things for themselves" sets up a challenging environment from which communication is expected to succeed.

Researchers such as Boush, et al. (1994), Carroll (1995) and Broadbent (1994) present arguments to suggest that for advertisers, adolescence as a "time-in-life" is inherently a difficult time to try and get a message across. Other researchers have however gone further in suggesting that this adolescent communication challenge is not only true of the age but also true of the times. For example, authors such as Khermouch and Green (2001) suggest that the current crop of adolescents comprise a large consumer group known as "Generation Y" who are thought to be quite unique, with their own attitudes toward consumption that requires marketers to approach them in a tailored way if their communications are to succeed. Generation Y are those born between 1979 and 1994 (Solomon, 2001). He suggests that more so than other generations "Generation Y is armed with its own unique identity, values, ideals and ideas" (p.2). Neuborne (1999) suggest that because of these large differences in the character of the Generation Y audience, "things that have worked in the past in terms of advertising tactics and practices are doomed to fail in the future" (p.3). Neuborne goes on to state that as a consequence of the unique and recent character of Generation Y, marketers are scurrying to understand advertisings' affect and persuasiveness on this new generation of consumers.

When health authorities communicate with an adolescent audience in Generation Y they are said to be communicating to a consumer group who have high

levels of media literacy and who are very discriminating of the content of communications (Solomon, 2001; Mangleburg & Bristol; Burns & Thompson). This group are also said to be suspicious of advertiser's motives (Mangleburg & Bristol; Boush, et al. 1994) and easily bored with communication deemed to be lacking in relevance to them or those communications lacking impact (Kharmouch & Green, 2001; Neuborne, 1999; Burns & Thompson, 1998). All of the communication realities of the age group, coupled with a high level of marketing literacy and 'street smarts,' demonstrate just some issues that create challenges for health promotion marketers trying to create persuasive advertising. Solomon (2001) points out that marketers therefore now recognise that to penetrate the scepticism and capture the attention of Generation Y, they have to bring their messages to these people "in a different ways to the accepted norm."

It is for these reasons that any attempt at communication requires an approach that is described as being "at a grass roots level," which has integrity, credibility and relevance (Carroll, 1995; Burns & Thompson, 1998; National Expert Authority Committee on Alcohol, 2000). Carroll (1995) for example, suggests any communications that are intending to communicate to adolescents should be seen to speak from "within the adolescent's world in ways that are credible, yet non-judgemental." "They must talk to target audiences, not at them" (p.3). Furthermore, Carroll goes on to suggest the voice of anti-drugs must be just as 'cool' as its pro-alcohol counterpart.

Of importance to this discussion, areas such as *attitudes toward the object* and *attitudes toward the advertisement* suggest that the general approval of an object such as anti-binge drinking messages or the liking of advertising for that object "is important in the attainment of communication success" (Burton & Lichtenstein, 1988; Muehling & Lacznaie, 1988; Mackenzie & Lutz, 1989; Biel, 1990). Understanding of and investigation into consumer's level of acceptance of the topic of health promotions and its advertising is an important area of interest for this dissertation. This is because it helps to not only understand and presuppose likely

reactions to health promotional initiatives but it also helps to identify attitude variables that can be used as knowledge at a later date to assess marketing communications effectiveness. This is an area that will be discussed in more detail in chapter two and three of this dissertation.

Marketing theory also suggests that consumer perception toward marketing communications is an important consideration that needs to be taken into account if communication effectiveness is to be achieved (Belch & Belch, 2001). Research has indicated that consumers will actively choose whether to make themselves available to information deemed relevant or credible through the process of *selective exposure* (Belch & Belch, 2001). For example, a negative attitude by adolescents towards health promotions anti-binge drinking communications could result in a disappointing behavioural modification campaign. Furthermore, communications can fail or under perform where consumers engage in *selective comprehension*. When this occurs they interpret information on the basis of their own attitudes, beliefs, motives, and experiences (Belch & Belch, 2001). Where health promotions lack credibility or relevance, or the consumer has a negative attitude towards the topic or individual promotions, the concept of filtering is likely to come into play and promotions might be deemed trite and disregarded by the target audience.

Previous discussions aside, research has suggested that the Australian community appears to support health promotions over alternatives such as a higher incidence of negative personal or more general societal outcomes (Boutlis, 1999). The Commonwealth Government's tax payer funded *National Drug Strategy*" and subsequent health promotions can be seen as evidence of this. In line with government initiatives, Western Australian research by Donovan, Holman, Corti, and Jalleh (1998) concluded that in Western Australia at least, people's health priorities appear to be consistent with the national goals and targets for Australia's health and the Health Department of Western Australia (HDWA) priorities. While this research was not specific to adolescents, these findings can still be considered important for health promotion planners because they offer some reassurance. Firstly because the

current direction of existing health promotions is likely to have some support and secondly, because the likely effectiveness of any future promotions may be more likely to occur due to consumer acceptance of health promotion communications. For example, Donovan, et al. (1998) noted that the extensive literature with respect to attitude and behaviour change suggests that “it is likely that where a health authority’s selected priorities are congruent with community perceptions, the achievement of health promotion campaign objectives are more likely to be facilitated”. Of interest to this study, the previous statement therefore implies that target audience approval of the promotional activities will facilitate the success of initiatives like binge drinking advertising.

In Australia, adolescent anti-binge drinking health promotion advertising campaigns tend to use motivation techniques described by Katz (1960) as being those that are couched in a *positive, combination or punishment* format (p.163). This type of approach falls under the umbrella of marketing theory known as *instrumental conditioning* or *operant learning* which is a type of behavioural learning theory. In this type of situation, adolescent consumers are shown a portrayal where another young person makes decisions for the purpose of achieving a desired consequence or so they can avoid an undesirable consequence. This approach often uses graphic details to arouse fear in viewers about the impact of alcohol on health or social wellbeing (National Expert Authority Committee on Alcohol, 2000). By taking this approach, health promotion authorities try to *shape* adolescent attitudes and behaviours. These communications show adolescents in scenarios where both appropriate and inappropriate alcohol use might occur and as a consequence either a positive or negative outcome results. Bandura (1969) refers to the observation of these positive or negative outcomes as either “inhibitory” or disinhibitory” effects which can ultimately influence consumer behaviour. By using this advertising approach adolescents get an opportunity to vicariously rehearse possible alcohol consumption roles before actually being confronted with the real consumption decision. In effect, the adolescent audience views another’s actions and vicariously experiences the young actors subsequent negative or positive reinforcement.

Therefore, vicarious learning occurs during observation. Observational learning theory suggests that “when people watch the actions of others and note the reinforcement they receive for their behaviours – learning occurs as a result of vicarious rather than direct experience” (Solomon, 1999, p.82). Typically, the advertisements execution might take a format that demonstrates a social situation feared by an adolescent audience, for example where a *fear appeal* is used, and a young person might undergoes horrible humiliation or an injury due to a bad decision they made where they misused alcohol. This topic of attitude and behavioural change techniques will be looked at in more detail in chapter two and three of this dissertation.

In preparation of this dissertation a review of the literature occurred that looked into the likely effectiveness of fear based adverting appeals. It was found that debate exists as to the true effectiveness of fear advertising techniques. The debate focuses on among other things the idea that extended exposure to threats such as these desensitises the viewer (Boutlis, 1999; National Expert Authority Committee on Alcohol, 2000). Research into the effectiveness of fear appeals both in the short and long term has been said to be lacking (Henthorne, LaTour & Natarajan, 1993; Snipes, Latour & Bliss, 1999). This aside, it has been argued that fear based appeals can be extremely powerful in persuading people, but only under certain conditions (Snipes et al., 1999; Witte & Allen, 2000). It has been widely acknowledged that fear appeals can and do fail if they are not used correctly (Witte, Berkowitz & Cameron, 1998; Witte & Allen, 2000). This topic of fear advertising will be looked at in more detail in Chapter two and three of this dissertation.

In addition to the review of fear advertising literature, a comprehensive literature review was also conducted to try and determine whether any data were available to suggest the likely effectiveness of *negative*, *punishment* and *positive advertising* executions. This review seemed to suggest that there was very little

information available in this area. This is particularly true in the area of positive reinforcement. Working in the health promotion area, researchers Donovan and Henley (2000) came to a similar conclusion with regards to positive advertising executions finding that there was very little information on the likely effectiveness of positive advertising appeals compared with negative advertising appeals. Henley explained that their study compared threat versus positive execution styles for a hypothetical health promotion initiative that had as its objective to encourage improved nutritional choices and regular exercise (Henley, Personal Communication, 28 November, 2001). One qualitative study was however found into smoking cessation by Tripp (1989) that undertook research that compared both threat and positive reinforcement advertising executions. This study concluded that on the whole, smokers were much more receptive to messages containing positive reinforcement or encouragement.

Other small sized studies such as focus groups have generated anecdotal evidence suggesting activities like smoking cigarettes and drinking alcohol can only be de-marketed to adolescents by steering the advertising appeal and execution away from more mainstream ‘adult appeals,’ that might emphasise as their priority the physical and financial cost of smoking or drinking at hazardous or harmful levels (Lilley, 1995). In the case of adolescents, evidence suggests they are more likely to react positively to short-term social concerns that tend to go hand-in-hand with the loss of control that occurs when drinking is done to excess. Arguing, fighting, unsafe sex, accidents and exclusion from the peer group are all prominent social concerns for adolescents (Lilley, 1995; Wood, 1995; Health Promotion Services, 1996b; Health Promotion Services, 1999a; Schoenbachler & Whittler, 1996; Martin, 1997; Davey, 1998).

In response to this research, the Commonwealth Government has in recent years produced advertising that has as its approach depictions where a young person decides not to drink, or drinks in moderation, and then this behaviour is rewarded for example, with a ‘boy-meets-girl’ positive outcome. The most recent campaign first

aired in Australia by the Commonwealth Government in 2000 was the ‘*Choices, Where Are Yours Taking You?*’ campaign. This approach to advertising execution used what appeared to be a rather novel or even unique style where *both positive and punishment* reinforcement scenarios were used in the one “*combination reinforcement*” advertisement.

Despite all of the health promotion advertising that has occurred, little appears to be understood as to how one can best shape these communications to attain optimum impact with adolescent consumers. Atkin (1993) for example, notes that quite a large volume of research has been conducted and continues to be done on the effects of pro-alcohol advertising, yet relatively little research has evaluated the effectiveness of health promotion alcohol campaigns with adolescents. Furthermore, mass media campaigns conducted in Australia to promote responsible drinking behaviours in the general population and in adolescents have shown inconsistent results when evaluated (National Expert Authority Committee on Alcohol, 2000). Similar observations can be made when assessing the limited research data that has been generated from specific campaigns targeted at adolescents (Research & Marketing Group Public Affairs & International Branch, Commonwealth Department of Human Services & Health (CDHSH), 1996).

Where research has occurred, it has been suggested that these evaluations have generally looked at the short-term effects, such as recall of messages, rather than long term changes to attitudes and behaviours in relation to excessive alcohol consumption (National Expert Authority Committee on Alcohol, 2000). Furthermore, those campaigns that are assessed are often assessed for effectiveness in their totality as part of a wider integrated promotional campaign and as a result, campaign elements such as execution styles are not evaluated in isolation. There have for example, been evaluations undertaken in the area of advertising recall and in the area of adolescents’ post advertising drinking trends following specific youth alcohol campaigns. Again, results in these studies tend to be mixed. One campaign that has been credited with initial signs of success in changing drinking behaviour

was the Commonwealth Government's *Choices, Where Are Yours Taking You?* campaign. But despite these initial signs of success by health promotion campaigners in changing behaviour there has been little research into understanding the specific advertising *creative executions* in anti-binge drinking advertising that might have brought about this success.

A limited amount of research was also found during the literature search for this study that concentrated on the area of adolescent anti-binge drinking advertising. This research briefly assessed adolescent attitudes toward alcohol health promotion and health promotion advertisements and their likely effect on adolescent drinking behaviour. These findings however, were very limited and certainly non-specific to the advertising appeals that have been used to date (Broadbent, 1994; Martin, 1997; Shanahan & Hewitt, 1999).

Much of the research into adolescents and alcohol has concentrated more on the possible negative effects of large budget and evocative *pro-alcohol advertising* and other alcohol promotion methods. An observation of the advertising execution approaches taken by these *pro-alcohol promotions* identifies the norm in these types of communications is to use advertising laden with evocative imagery coupled with the brand to form an execution style called *classical conditioning*. To a lesser degree, *positive reinforcement execution* styles that *instrumentally condition* their audiences seem to also be used quite often (Atkin 1993; Grube, 1995). In these promotions, where classical conditioning techniques are in use, adolescents are thought to be particularly susceptible to these messages that are wrapped in evocative and exciting imagery. (Aitken, Eadie, Leather & McNeill, 1988). Repetition is key in the application of this approach because over time it helps to reinforce the desired paired association required between the images and the brand within the mind of the audiences.

Even in this well researched area of pro-alcohol advertising, the United States National Institute of Alcohol Abuse and Alcoholism suggests that findings from these studies to assess advertising effectiveness have at best shown mixed or inconclusive results as to their effects on adolescents (1998). This National Institute of Alcohol Abuse and Alcoholism assessment into the effectiveness of pro-alcohol promotion has however been controversial. A number of authors disagree with the findings of the National Institute of Alcohol Abuse and Alcoholism suggesting that there is considerable evidence available in the data that suggests the negative effects of alcohol advertising on adolescents and others is clear (Atkin, 1993/95; Austin, 1994; Grube, 1994; Casswell, 1995a; Wyllie, Holibar, Casswell & Fuamatu, 1997; Jones & Donovan, 2001).

This controversial and unresolved research environment in mind for further research into the likely effectiveness of health promotion initiatives. Therefore it seems justified that this study concentrates on generating further data into the likely effectiveness or lack thereof of a number of anti-binge drinking advertising executions. To this end, as its key priority *this study will attempt to determine which of three different advertising executions styles is most likely to be effective in shaping adolescent attitudes and behaviours. These three different advertising execution styles include: 1) the positive execution style; 2) the punishment execution style; 3) and the combination positive/punishment appeal.* For the purpose of simplicity, in this study the positive/punishment appeal will be called the '*combination execution style*'. Adolescents' level of approval for a particular advertising execution will be measured using three criteria which will be justified and explained using the marketing theory that follows. The criteria that will be used to measure advertising execution styles includes:

- 1) The aggregate level of adolescent *approval of the advertisement* (A_{ad}) after seeing the three advertising execution styles

- 2) The aggregate level of adolescent *approval of the cause* (A_c) after seeing the three advertising execution styles
- 3) The aggregate level of *intention toward the behaviour* (A_{act}) after seeing the three advertising execution styles

Research into *attitudes toward advertising and causes* suggests that by simply identifying preferred advertising execution styles promotional campaigners will in future be able to choose execution styles with the expectation that they will be the most persuasive approach. MacKenzie and Lutz (1989) concluded that consensus appears to exist that *attitude to an advertisement* (A_{ad}) is indeed an important mediator of advertising response. More recently, Solomon (1999) suggested A_{ad} can affect the feelings of consumers to the degree that advertisements can directly affect brand attitudes. Research into A_{ad} suggest that consumers' A_{ad} can have implication on consumers' *attitude towards the cause* itself as well as their *intentions to act* on that advertisement (Solomon, 1999).

Determinants of A_{ad} include attitude toward the advertiser, evaluations of the advertising execution itself, the mood evoked by the advertisement, and the content in which the advertisement appears. These factors are also said to be instrumental in influencing attitudes to the brand or “object” (A_o) (Burton & Liechtenstein, 1988). In this dissertation it will be argued that liking the health promotions advertisement can be instrumental in improving attitudes to the cause of reducing binge drinking in adolescents, therefore A_c and A_o are thought to be an appropriate variable for measurement for this study. Grube (1994) demonstrated the relationship between a positive A_{ad} and the subsequent positive attitude toward the brand when he conducted a study that had as its specific focus the effectiveness of pro-alcohol advertisements on adolescents. In this study he applied A_{ad} theory finding that adolescents did as expected indicate a higher expectation to drink alcohol (A_{act}) at a

later date if they were part of a group that had reported a greater liking for alcohol advertisers' advertisements.

For the current study, components of the Commonwealth Government's 2000 adolescent anti-binge drinking campaign '*Choices, Where Are Your's Taking You?*' were used as the stimulus. In its standard format, this advertisement includes both a male and female version and uses a *combination advertising execution* style. In preparation for the study, the advertisement was re-edited into three different formats that comprise the *positive*, *punishment* and *combination execution* styles. These will serve as the stimulus in this experiment. The '*Choices, Where Are Yours Taking You?*' advertisement was just one component of what was a very comprehensive integrated marketing communications campaign that was used by the Commonwealth Government.

This advertisement was chosen as the most appropriate stimulus object for this study because it was not only very realistic, with its everyday "slice of life execution," but it was also considered to have an innovative advertising execution style that would lend itself to remodelling for this study. These two advertisements had a male and female version that both depicted *positive* and *punishment* reinforcement messages within a single television advertisement. Because the advertisement was so complex and multifaceted it provided the ideal opportunity for the components of the advertisement to be deconstructed, re-edited and reassembled to ultimately comprise the three different advertising portrayals that were needed for this study.

The stimulus advertisements that were prepared for this study in two out of the three cases include some element of a threat appeal that was intended vicariously to arouse fear in the adolescent audiences. The third execution was a positive execution style. After reviewing the fear appeals literature, it was anticipated that this study would reveal that the combination advertising execution style was most

likely to be the more effective method for communicating to adolescents about alcohol restraint. This combination execution style was thought to be more suited in this role because the components of this execution comply very closely with the recommendations made by Witte and Allen (2000) with reference to the design of threatening advertising. For example, reinforcing the earlier findings of what Tanner, Hunt and Eppright (1991) called their “protection motivation model,” Witte and Allen (2000) recommended that health promotion campaigns should include the following components when presenting threat-based communications.

- 1) They should increase the references to the severity of the proposed threat (severity meaning - The magnitude of the threat)
- 2) They should increase the references to the target populations’ susceptibility to the threat (susceptibility meaning - the likelihood of experiencing the threat)
- 3) Messages with strong appeals that seem serious and likely to happen will be most motivating, whereas weak appeals will fail to facilitate behavioural change
- 4) Strong fear appeals will work only when accompanied by an equally strong efficacy message

The recommendations made by Witte and Allen were based on earlier research that suggested the dynamic between *level* of fear and effect has been shown to be *curvilinear if the communication is not designed appropriately* (Ray & Wilkie, 1970; Tanner, Hunt & Eppright, 1991; Witte, Berkowitz & Cameron, 1998). Earlier evidence suggests inappropriately designed communications result in *coping actions* where the receiver emotionally blocks the message by tuning it out, or by perceiving it selectively, or by denying its argument (Belch & Belch, 2001). Conversely, weak threats will facilitate low levels of fear that are likely to be ineffective because they have insufficient motivation to elaborate on the harmful consequences that might arise from continuing a behaviour (Anand Keller & Goldberg Block, 1996).

Research by MacKenzie, Lutz and Belch (1986) and Witte and Allen (2000) have acknowledged the existence of both *desirable facilitating effects* and *undesirable inhibiting effects* in threat based communications. It is however now generally thought that those undesirable inhibiting effects can to a large extent be neutralised if the marketer addresses those four areas outlined in Tanner, et al.'s protection motivation model (Witte et al., 1998).

With this previous discussion in mind it is anticipated that in this study the combination advertising execution style will be more effective for communicating to adolescents than either the punishment or positive execution styles. This outcome is expected because the combination advertising execution leverages the best of the qualities of both the punishment and positive execution styles. These *combination* portrayals effectively demonstrate to their adolescent audience a peer (model) who attains positive outcomes through their own choice of actions. Therefore, the results of the behavioural choices are demonstrated in a non-confrontational way and this approach is devoid of adult directives that might be alienating. Furthermore, this combination execution is thought to incorporate enough fear to initiate facilitating effects. This fear is also presented in the context of a presentation approach that is in compliance with those techniques prescribed by Tanner, et al.'s (1991) protection motivation model. Recapping, this model suggests that where inhibiting factors are likely to surface is important that the communication be constructed in a way that might observe those four points that were prescribed in the protection motivation model.

The positive reinforcement execution advertisement in this study relies on none of the threatening appeals previously discussed. Instead it relies on the operant conditioning effect ($R \rightarrow S$) that in this case, allows the adolescent audience to vicariously share the experiences of a peer who: a) *responds* to their environment using appropriate restraint around alcohol with; b) the *consequence* being that the actor in the communication achieves friendship, popularity, fun and romance through his or her appropriate choice of actions. Previous research has suggested

that the fear approach to advertising can be a very strong motivator for facilitating change (Belch & Belch, 2001). Very little evidence has however been found in preparation of this thesis that can be presented to suggest that positive advertising execution styles are likely to be more effective than alternative execution styles in shaping the attitudes and behaviours of adolescents toward health promotion issues. To the contrary, the lack of research in this area and the general lack of use of positive appeals in the advertising of health issues provides anecdotal evidence to suggest these methods are not effective in eliciting change in adolescents. It is for these reasons outlined, that it is anticipated that the positive advertising appeal will be less effective for communicating to adolescents than either the combination or punishment appeals.

1.1 Significance of the Study

Little doubt seems to exist that the misuse of alcohol has the potential to be quite damaging to society, particularly in the context of adolescents. For example, the National Household Drug Survey (2001) determined that in Australia, at least two thirds of all alcohol consumed by people under the age of 25 was drunk in a manner that presented both short term and acute health consequences. In 2001, amongst those aged 14-17 years, 21 per cent of boys and 25 per cent of girls reported that they had in the last month drunk alcohol at levels that put them into that short term risk group (National Drug Strategy, 2003). Information like this makes it apparent that moderation when drinking alcohol is only used in the minority of cases where young Australians are concerned. It therefore seems quite reasonable to expect that the topic of health promotion research that looks into facilitating any kind of reduction in adolescent binge drinking would be an area that is comprehensively researched. But this does not appear to be the case.

Initial research into this topic concluded that only a small amount of research appears to have been undertaken to determine which types of advertising execution styles are most likely to be effective with adolescent binge drinkers. This is despite the fact that alcohol and other drug education is a common response to drug use and drug problems in Australia and that this response continues to be contested as *having a long history of perceived failure* (Munro, 1997). Prior to designing an advertising execution approach, it is vital that the communication is communicated to the target audience in an evocative, memorable and persuasive way. Failure to do this costs health promotion marketers time, money and public goodwill that may be difficult to recoup.

This is not to say that health promotion marketers are not already well aware of the imperatives of their promotional environment. The realisation for them is that: 1) there already exists a substantial imbalance in share-of-voice between pro versus anti-alcohol promotion; 2) pro-alcohol is considered more appealing than its anti-alcohol counterpart; 3) pro-alcohol advertising is considered more impacting, persuasive and interesting than its anti-alcohol counterpart (Aitken et al., 1988; Atkin, 1993; Perry, 1998; Kelly & Edwards, 1998). These externally driven marketing influences, peer and parental influences, plus the impatience of the adolescent chemistry all increase the difficulty of the task (Jessor & Jessor, 1977; Elkind, 1978) and create a situation where there seems to be no room for complacency.

This discussion identifies that the need to communicate effectively to adolescents is imperative and the task is challenging. Relatively minor refinements in an advertisement prior to its airing can have substantial impact on campaign effectiveness and as such has led to increasing interest in *diagnostic* advertisement pre-testing which will assist in the goal of producing maximally effective advertisements (MacKenzie, Lutz & Belch, 1986). This study will therefore set about testing the advertising diagnostics of three different advertising executions. For example, where research is generated and used to plan theoretically guided

advertising campaigns these campaigns tend to go on to have a much greater chance of success, achieving their goals in a more efficient and timely manner, and cost less to conduct (Witte, Berkowitz & Cameron, 1998).

In the spirit of marketing research, this study will attempt to contribute to the body of health promotion knowledge specifically in the area of adolescents binge drinking. By doing this, it is envisaged that future researchers and health promotion campaigners who are working on reducing adolescent binge drinking will be aided by this new information that would otherwise be unavailable. Furthermore, this study has the potential to be transferable into other closely aligned areas of health promotion. For example, the data from this study might be transferred readily to the area of health promotion that addresses the early uptake of cigarette smoking in adolescents or might help in the reduction of adolescent drink driving.

1.2 Purpose of the Study

Binge drinking is the norm for many Australian adolescent drinkers who more often than not drink for the purpose of getting drunk (Shanahan & Hewitt, 1999). In response to social phenomena such as this, it could be reasonable to suggest that continued health promotion communications using advertising are required by Australian communities.

Despite the popularity of using advertising aimed at adolescents to promote restraint around alcohol, little seems to be understood about how best to present these communications. In the past, appeals incorporating operant conditioning methods that are observed vicariously by audiences have been used. These appeals used both positive and punishment reinforcement appeals with the punishment approach tending to be favoured over the positive advertising approach.

More recently, a combination of both the positive and punishment appeal in advertising has been in vogue with the Commonwealth Government. In these advertisements the two communication approaches have been rolled into the one marketing communication. The reasoning for this has not been explained in the literature to follow. However this combination approach may be in use because it offers health promotion planners one execution style that is able to incorporate the best persuasive components of both the positive and punishment approaches. In this appeal the motivational stimulus of the fear appeal is on display but this is also presented in the context where there is an alternative and a contrasting stimulus that prescribes a more appropriate and rewarding behavioural approach to the use of alcohol. By presenting the advertising in this way it seems to support the approach recommended by Tanner, et al. (1991) in their protection motivation model and more recently by Witte and Allen (2000) that suggested threat based advertising requires the advertiser to couple the threat message with an alternate realistic and achievable behavioural response to the threatening scenario.

This study will therefore attempt to provide further insight into which of the three advertising execution styles is likely to be the most persuasive in influencing adolescent attitudes and behaviours toward reducing the incidence of alcohol misuse. It is hoped through doing this study the results will help health promotion planners to better communicate to their adolescent audiences about alcohol misuse. If effective communication can be achieved health promotion authorities might then expect to see benefits in both the short and long term as adolescents learn more appropriate alcohol management skills that are necessary for a life where alcohol will almost certainly be a common part of their social landscape.

1.3 Research Hypothesis

This study will therefore attempt to generate data that might assist in providing answers or insight into the three hypotheses to follow.

The Three Hypotheses:

- H1: The combination advertising execution style will be more effective in producing positive attitudes in adolescents towards the advertisement ($+A_{ad}$) than either the punishment or positive advertising execution styles
- H2: The combination advertising execution style will be more effective in producing positive attitudes in adolescents toward the cause ($+A_c$) of reducing adolescent binge drinking than either the punishment or positive advertising execution styles
- H3: The combination advertising execution style will be more effective in producing a greater intention to use restraint when consuming alcohol or refrain from using alcohol altogether ($+A_{act}$) than either the punishment or positive advertising execution styles
- * The combination execution entails the use of the punishment and positive messages both bought together to comprise the one advertisement message

1.4 Conclusion

This chapter has touched upon alcohol usage in Australia and the issue of adolescent binge drinking. The discussion then briefly reviewed literature that appears in chapters 2 – 3 of this dissertation covering subject areas such as adolescent development, attitudes, motivations and behaviours. Promotions that promote alcohol as well as promotions that try to reduce alcohol misuse were also very briefly mentioned and discussed in the context of an adolescent audience. The concepts of *attitudes toward advertising*, *attitude to the causes* and *attitude toward the behaviour* have been mentioned as were the subjects of *classical conditioning* and *operant learning* and *fear advertising*. The initial conclusion from this discussion was that empirical evidence is lacking on what is the most appropriate way to communicate with adolescent drinkers to introduce restraint into their drinking. In response to the presentation of this information, this chapter has now concluded by tabling three hypotheses that are of main interest to this study.

To follow, chapters 2 and 3 of this dissertation review what was considered the most relevant body of literature available to this subject area. After this process is complete, this literature will be used to construct a theoretical framework on which to base this study on. Chapter 4 introduces the methodology for this study while chapter 5 presents the preliminary research findings and analysis pertaining to the research hypotheses. Chapter 6 will then review the results of the hypotheses testing before undertaking further investigation into the three research objectives that are of general interest to this study. This chapter will also contain a discussion on the implications of this research and recommendations will be made as to any other future research that might be desirable in this area. As a final discussion point, the limitation of this study will also be identified and discussed.

Chapter Two - Review of the Literature

2.0 Background on Alcohol in Australia

Every society has embedded in its culture the use of at least one psychoactive drug, with alcohol believed to be the oldest and probably the most widely used drug in the world (Health Promotion Services, 1997a). This is true in contemporary Australian society where the most widely used and socially approved psychoactive drug is alcohol (Gossop, 1987; Health Promotion Services, 1999a) whose use is an entrenched and accepted part of Australian life. For example, research by the National Drug Strategy Household Survey (NDSHS) in 1998 found that 90 per cent of Australians over the age of 18 years had tried alcohol. This research also indicated 80.5 per cent of Australians over the age of 18 years classified themselves as being regular drinkers (consuming alcohol on at least one day per week) or occasional drinkers (consuming alcohol less often than one day per week).

Alcohol has always played a significant part in Australia's history. When the First Fleet arrived in 1788, the British flag was first raised at Sydney Cove and Captain Phillip used alcohol to toast the King's health (Health Promotion Services, 1997a). Alcohol was soon to become an integral part of most commerce during the early days of the colony in New South Wales. From these earliest days, the new colonists in Australia were reported to be heavy drinkers. It has been reported that the first European settlers in Australia drank more alcohol per head of population than any other community in the history of mankind (News South Wales Tourism, 1999, www.sydney Australia.net/tourism/sydney/ history/sydhist1.html).

Early Australian history saw the use of rum as a currency. The monopolisation of this alcohol by the soldiers of the NSW corps created a corrupt system of trade where the officers of the corps dominated the early governors of the

colony. When the hapless Governor William Bligh (who had only recently returned from his mutiny on the *Bounty*) tried to stem this corruption, he was imprisoned by the soldiers and officers of the corps in what became known as the infamous Rum Rebellion. Bligh was ultimately expelled from the colony in the mutiny and forced to sail to Indonesia (News South Wales Tourism, 1999, www.sydneyAustralia.net/tourism/sydney/history/sydhist1.html).

Levels of consumption across the population have fluctuated over the years. The gold rush saw a peak in consumption of spirits, but by the end of the 19th century, Australia had become a beer drinking country and with this, per capita consumption of pure alcohol had halved (Room, 1988). Per capita alcohol consumption continued to fall in the first three decades of the 20th century, reaching its lowest point in 1932, at under 2.5 litres of pure alcohol per annum. Up until the late 1960's, drinking was a male group activity, part of a tradition of male "mateship", and "shouting" a round of drinks, with its further obligation to share in and continue drinking (Room, 1988). Hotels, where the drinking was done, were a male domain; women drank little or not at all, at least until the 1960s. "During this period, public drunkenness was the defining issue in discussion of alcohol problems. The "6 o'clock swill" at hotel closing time only served to reinforce these patterns writes" (Room, 1988, p.24).

By 1975, alcohol consumption had reached 9.5 litres per person, per annum, at least as high as during the gold rush era of the 1850s (Room, 1988). Since this time alcohol consumption has steadily declined. In 1991, Australia was ranked 17th in the world for per capita consumption of alcohol. Between 1988-89 and 1993-94, per capita consumption of total alcohol dropped by 10 per cent (Room, 1988). This figure has continued to reduce in recent years with Australians in 2000 consuming 7.8 approximately litres per person. In 2001, research suggested that Australians spent about \$8.3 billion on alcoholic beverages (Australian Bureau of Statistics, 2002, Cat.5204.0).

The consumption of alcohol is widely accepted in Australian society as having distinct social benefits and in some cases, health benefits. It is often consumed with meals, in social gatherings, or at special occasions such as celebrations. Dufour (1996) writes that alcohol is known for its ability to “improve the mood by facilitating mood states of happiness and euphoria” (p.145). It is used as a relaxant, a reward at the end of a session of hard work or as a social lubricant to enhance communication and lower inhibitions. It is also generally accepted by medical practitioners and health authorities that moderate drinking will probably not harm your health. In fact, there may even be some health benefits accrued from drinking at moderate levels (Health Promotion Services, 1999c). The HDWA cites such health examples as in the cases of reducing the incidence of heart disease, gallstones and stroke. These health benefits are considered especially true at low and moderate drinking levels (Dufour, 1996). Research reported by the Australian Bureau of Statistics suggested that indeed in the majority of cases (Males 81 per cent and females 84 per cent) Australians are moderate drinkers, consuming levels of alcohol that should be considered to be at a low risk to health (2002, Cat.4364).

However, the misuse of alcohol causes significant harm to individuals and to the Australian community. Behind tobacco, alcohol is the second greatest cause of drug-related deaths and hospitalisation in Australia (Australian Institute of Health and Welfare, 2002). Inappropriate alcohol consumption accurately demonstrates an example of what has been termed *the ‘dark-side’* of consumer behaviour (Solomon, 1999). It has been estimated that the harm caused by excessive alcohol consumption accounts for 4.9 per cent of the total disease burden in Australia (Mathers & Stevenson, 1999). In 1998, the number of deaths attributed to alcohol consumption was estimated to be 3,271 (Ridolfo & Stevenson, 2001). For the same year, the number of hospital separations attributable to alcohol consumption was 43,000 (Ridolfo & Stevenson, 2001). The economic cost to the Australian community of alcohol misuse has been estimated at about \$4.5 billion (Colins & Lapsley, 1996).

The cost of alcohol related road trauma alone in Australia has also been estimated to be \$1.34 billion per year (National Drug Research Institute, 1999).

Excessive consumption of alcohol causes many diseases, injuries and social problems. Evidence indicates that regular drinking beyond low-risk levels can hurt your health and cause problems at work, at home and with friends (Health Promotion Services, 1999a). Alcohol has been linked with domestic violence, marital breakdown, homicide, homelessness, assault and vehicle and occupational injury (Wallace, 1986; Health Promotion Services, 1997b). Alcohol has also been related to common incidents of violence on licensed premises (Gossop, 1993). Demonstrating this, the Australian Institute of Criminology found that between 1989 – 1996, alcohol was present in up to 60 per cent of homicide incidents in Australia and in nearly half of these, the victim had been drinking with their assailant (James & Carcach, 1997). Unwin, Codde, Swenson and Saunders (1997) also reported that more than 70 per cent of people in Australia who have committed a violent crime had been drinking beforehand.

So although there appears to be both social and health benefits that can be brought about by appropriate alcohol use by contrast, the misuse of alcohol causes many undesirable social problems. In an effort to try and reduce the potential harm alcohol might have on Australian society, the Commonwealth, State and Territory Governments have developed appropriate alcohol intake guidelines for both men and women. For example, the Commonwealth Government has recommended that men consume no more than 4 standard drinks per day (40 grams) and women consume no more than 2 standard drinks per day (20 grams) (Health Promotion Services, 1997a).

Other strategies used in Australia to try and reduce the incidence of inappropriate alcohol intake include laws in premises where alcohol is served that prohibit the serving of alcohol to intoxicated people, the banning of happy hours and the strict monitoring of opening hours at licensed premises. Laws regarding the

drinking of alcohol and driving are also used to reduce the incidence of alcohol affected road trauma. School programs on health and nutrition try and educate young people on the dangers of inappropriate alcohol use as do media campaigns. All Commonwealth, State and Territory Governments design public health messages to communicate with various audiences. A few examples of these include media advertising, sponsorship, public health functions and promotion through health practitioners and their officers. Recent examples of mass media communications that were targeted at adolescents that were advocating restraint when drinking include the Western Australian *Respect Yourself* campaign and even more recently, the Commonwealth Government's *Choices, "Where Are Yours Taking You?"* campaign. In more recent years alcohol education programs have been initiated on a more coordinated, nation wide basis for example through the Commonwealth's comprehensive National Alcohol Strategy.

2.1 Alcohol and Adolescents

In Australia, patterns of drug use have altered in recent decades. The young now have high levels of tobacco, alcohol and illicit substance use compared with older Australians (Hanlock, Watch, Henry, Redman & Sanson-Fisher, 1995). Research has indicated that over the last two decades, more young Australians are: drinking alcohol; drinking at an earlier age; increasingly adopting high risk drinking patterns and; are at increased risk of alcohol-related injuries and death (National Alcohol Strategy, 2003). While both boys and girls can both exhibit worrying drinking patterns girls appear to be the ones most at risk. For example, in 2003 the National Alcohol Strategy reported that 25 per cent of females aged between 14-17 reported drinking at levels considered risky to short term health during the 4 weeks before surveying. This compares slightly less favourably with boys, with 21 per cent of boys reporting that they drank at a risky level in the last 4 weeks.

The HDWA found 95.2 per cent of Australia school students have consumed alcohol in their lives and 71 per cent of 12-17 year-olds had consumed alcohol in the last 12 months. By 15 years of age, both male and female adolescents consume on average five alcoholic drinks per week. At age 17 years, male drinkers consume on average nine alcoholic drinks per week, while female student drinkers consume on average seven drinks per week (Health Promotion Services, 1996a). These findings come in spite of State and Federal youth alcohol campaigns and in spite of alcohol being classed as an adult-only product. Alcohol's adult only status means that alcohol is therefore illegal for adolescents to buy, or vendors to sell, until the young person reaches 18 years of age.

The HDWA concluded that young people are particularly vulnerable to drinking alcohol to excessive levels. Their research highlighted an expectation held by many young drinkers to “get drunk” in most drinking situations (Health Promotion Services, 1996a). In this same survey it was found that:

- Binge drinking appeared to be the norm for most participants, particularly amongst the 14 to 16 year-olds
- Many young people find being drunk was acceptable, and referred to drunkenness in terms that implied a positive association
- Drunkenness was often attributed a ‘hero’ status which further encouraged excessive alcohol consumption

Drinking at or below *two standard drinks for women per day and 4 standard drinks for men per day* is considered to be low-risk drinking. A standard drink is classed as having 10 grams of alcohol. Drinking at levels above this is then classed by the HDWA and the National Health Medical Research Council (NHMRC) as

being ‘*hazardous*’ through to the more serious classification of ‘*harmful*’ as the intake increases (Health Promotion Services, 1999c). Using these guidelines, Health Department research has found that by age 15, 11.6 per cent of males and 19.7 per cent of females exceeded the recommended NHMRC guidelines for “safe” adult alcohol intake limits on at least one day in the previous week (Health Promotion Services, 1997b). In other words according to NHMRC guidelines, in Western Australia by the age of 15, more than 1 in 10 boys and just under 1 in 5 girls were already drinking what is considered hazardous or harmful levels of alcohol.

On a national level, the National Alcohol Action Plan (1998) reported that 48 per cent of males and 69 per cent of females in this 14-19 year-old group who consume alcohol do so, “usually” to a hazardous or harmful level. Forty five per cent of males and 66 per cent of females in the 20-24 year-old age grouping who consume alcohol also indicated that they do so “usually” to a hazardous or harmful level (The National Alcohol Action Plan, 1998). Similar findings have emerged in studies by Patton, Hibbert, Rosier, Carlin, Caust and Bowes (1995) and in the National Household Drug Strategy (1996/1998). A drinking event where the individual consumes alcohol to a hazardous or harmful level is known more commonly as binge drinking (Health Promotion Services, 1997c). Drinking excessively during a single session has the potential to damage health just as other undesirable drinking behaviours such as alcohol dependency or regular excessive use can.

While girls may not drink as much in ‘absolute’ terms as boys, the research data has indicated that adolescent binge drinking appears to be more prevalent in girls. This is because females generally have a smaller body mass than do boys. Hence, alcohol has a more pronounced effect on the female physiology (Patton et al., 1995; Health Promotion Services, 1997a; Australian Institute of Health and Welfare, 2002). High levels of drinking in adolescence however, is not just an Australian phenomenon. Girls in for example North America, are also more likely to report a

higher incidence of binge drinking than their male counterparts (Quigley & Marlatt, 1996).

The societal problems associated with the misuse of alcohol in adolescents tend to run parallel to that of the adult population. For example, Toomey, et al. (1996) reported that alcohol misuse among adolescents translates into numerous problems such as traffic crashes, drownings, vandalism, assaults, homicides, suicides, teenage pregnancies and sexually transmitted diseases. Other undesirable outcomes include vomiting, arguing with friends and embarrassing oneself (Health Promotion Services, 1999a). The Health Information Centre of Western Australia noted that young people aged 15 to 34 are the group most likely to experience hospitalisation for an alcohol-caused injury (Unwin, 1996). Road injury, a fall injury, occupational or machine injury or assault are the most likely causes of these injuries (Health Promotion Services, 1997d).

Adolescents acquire alcohol generally with ease and there are a number of avenues available to adolescents when seeking out alcohol (Health Promotion Services, 1995a). These avenues include, from their parents (32 per cent of cases); their friends (19 per cent of cases); by asking someone else to buy the alcohol (18 per cent of cases); buying it themselves (13 per cent of cases); a sibling buying the alcohol (7 per cent of cases); their homes (6 per cent of cases); and “other” sources (5 per cent of cases) (Health Promotion Services, 2000a). Martin (1997) points out there are even products readily available in supermarkets, for example, an essence named *‘The Cook’s Friend’* or an Asian rice cooking wine that have alcohol contents of about 17 per cent. The whole issue of adolescents acquiring alcohol can be succinctly summed up by John O’Hara, the head of New South Wales organisation ‘DrugARM’ who has made the following comment:

“kids are very good at getting what they want, they are two steps ahead all the time. They’re living with an adolescent industry that produces

counterfeit identification cards; or they steal alcohol from parents; or they buy from bottle shops and pubs that don't care. Acquiring alcohol is not problem for them.”

(Cited in Martin, 1997, p.25).

Research by the Directorate of School Education (1994) found that students *do not* monitor their intake of alcohol to prevent intoxication (Health Promotion Services, 1997b). It has also been found that adolescents do not know what the safe levels of alcohol to drink are and how alcohol works in the body (Health Promotion Services, 2000b). However, research that has been done by the Health Promotion Services in 1994 into adolescents' attitudes toward alcohol consumption, alcohol and other drugs concluded that the vast majority of young people are generally aware of the health risks associated with drinking. For example:

- Only 9 per cent of 15-17 year olds agreed that alcohol would not damage your health unless you were an alcoholic
- All were able to mention at least one health risk associated with drinking too much alcohol
- Only 10 per cent of respondents believed that a younger person's body was able to handle a lot of alcohol better than an older person's body.

(Health Promotion Services, 1996b, p.1)

The previous discussion demonstrates that alcohol continues to be widely used by adolescents, even though alcohol is clearly sanctioned in society as being an, 'adult-only' product. Adolescents consume alcohol in spite of:

- The legal barriers that have been set up by legislators to exclude adolescents from drinking until they reach the age of 18 years

- The ongoing warnings by school programs, health professionals and health authorities
- The numerous health promotions that communicate the personal risks young people take when they use, or more importantly, misuse alcohol
- The tangible and observable societal problems evident from alcohol use and misuse
- The clear social expectations placed on adolescents by the adult world to abstain from drinking until they are at least 18 years of age

This last point exposes a paradox in the way society perhaps approaches the issue of alcohol and the young. For example, adolescents are widely expected by society to abstain from alcohol use until they are 18 and the prevailing laws in Australia reflect this. Yet, despite this, data from the Health Promotion Services of Western Australia (2000a) indicated that adolescents are most likely (32 per cent), to acquire alcohol from their parents, or at least their homes.

2.2 Adolescent Motivations for Using Alcohol

Legislative, social and educational factors would be expected to act as a deterrent to the early onset of alcohol use and misuse in the community. However, there appears to be other factors that intervene and cloud the decisions that are ultimately made by adolescent consumers. Adolescent behaviours may in fact be motivated by any of the following or other factors:

- The desire to be seen to be ‘grown-up’ (Kleiber & Rickard, 1985, p.290)
- The need to fit in with peers or model other significant reference groups (Kandel, 1986; Kleiber & Rickard, 1985)
- Previous experiences in the home, through peers, through media portrayals that have conditioned and shaped behaviour (Kandel, 1986; Kleiber & Rickard, 1985)
- Through an individual’s own physiological design and the biological drive states (Kandel, 1986)

As has previously been touched upon, from its earliest beginnings, Australia has been a culture where alcohol consumption is the norm, with those who choose not to drink being in the minority. Generally, in any culture, when an individual goes from being an adolescent to an adult, they not only have greater responsibilities thrust upon them but they are afforded new opportunities or privileges. These opportunities or privileges are usually expected and anticipated as being part of their *rite-of-passage* (Kleiber & Rickard, 1985). One clearly accepted indicator in Australia of one’s coming of age is when a young person is free to walk into licensed premises and buy alcohol.

Often however, a conflict arises as to “when the individual determines they are entering the adult world, and when adults admit the individual into that world” suggest Jessor and Jessor (1977, p.559). This conflict between the cross-over from the adolescent to adult worlds is thought to give rise to the adolescent’s perceived legitimacy of using products such as alcohol and cigarettes that are considered “*adult-only products*” as they prematurely try to enter this ‘adult world’ (Jessor & Jessor, 1977; Kleiber & Rickard, 1985). “Adult-only” products are subsequently used at an earlier age than is often

considered desirable. These products take on the role of “social prop” by adolescents to elevate themselves into the adult world. Jessor and Jessor (1977) for example suggest adolescents, and especially those who are seeking adulthood and independence, are likely to try and achieve this through the imitation of adult-like or adult sanctioned behaviours. The United States experience again is similar to that of Australia even though the legal drinking age starts at 21 years instead of at 18 years as it does in Australia. For example, in the United States the consumption of alcoholic beverages is embedded in the social fabric of the nation and, for many adolescents, learning to drink has become a rite of passage and a signal of emergent independence (Boyd, Howard & Zucker, 1995).

Another possible motivation for the premature consumption of alcohol may be that it fits in with the leisure or recreational activities of the adolescent in a way that serves an *expressive* or *instrumental* value to the consumer. Noe (1969) argues that in adolescence, leisure more often takes an *instrumental* role rather than an *expressive* role. Alcohol therefore, could facilitate the attainment of a desired end-state. Noe (1969) suggests that in the adolescent context the alcohol may not necessarily be used to provide for them a feeling of euphoria, relaxation or solace (this would be expressive). Instead, the alcohol may be used as a tool that has an instrumental value in presenting the individual to the world as an adult. Another example Noe provides is where the adolescent may go to a party to drink alcohol because he or she feels the need to get intoxicated to relieve anxiety but instead the adolescent drinks the alcohol to “fit in with the scene.” By doing so, the adolescent aligns him or herself with friends and creates opportunities to meet others, preferably of the opposite sex (Noe, 1969). Again, in this case the alcohol usage is *instrumental* in its purpose.

Noe (1969) suggests adolescent motivations for drinking alcohol can be both expressive and instrumental. However, he argues that alcohol is likely to be used more for its ability to act as an entry visa into places or situations where young people want to be, thus making it instrumental. This view is supported by Kleiber and Rickards (1985) who have suggested that adolescent alcohol usage “probably

serves as a tool that is used as a *rite of passage* to a fuller participation within the group” (p.298). Applied research on adolescents’ *reasons for drinking alcohol* have been captured in these following studies. Adolescents report alcohol is thought to:

- Improve the mood and make them happy when they were sad and the use of alcohol is associated with pleasure, relaxation and having a good time, in the same way as it generally is with adults (Davey, 1994, Martin, 1997)
- Be fun, sociable and cool (Health Promotion Services, 1997b) and to fit in with peers (Kandel, 1986)
- Be fun, and helps with relaxation and forgetting problems (Midland, Farrington & McBride, 1996; New South Wales Department of Health, 1993)
- Be fun, it makes you happy, it improves your confidence, it makes you feel cool; it’s something to do and relieves boredom; it is attractive because it is accessible and; it’s good with friends or for acquiring friends (Broadbent, 1994)

The above reasons as to why adolescents drink alcohol are probably very close to those of adults who are often very influential in shaping their children’s future behaviours toward alcohol usage (McCallum, 1994; Broadbent, 1994; Goleman, 1995). Evidence presented by Mayer and Belk (1982) suggests “consumption stereotypes” typical of adults were found to be largely in place before adolescence occurs and these stereotypes were learned from family and the media. Supporting this belief, Broadbent (1994) suggests that young people who use and abuse alcohol “are often only following the well trodden path set down by the adults around them” and the patterns are well formed within the overall prevailing culture that not only sanctions alcohol, but actively promotes it. McCallum (1994) suggests

“this relationship between family factors and the use and abuse of drugs among adolescents is conclusive” (p.39).

Research by Gaines, Brooks, Maistro, Dietrich and Shagena (1988) indicated that exposure to parental alcohol use has been associated with children’s intention to drink alcohol and their perception of alcohol consumption as a positive activity. In addition the NSW Department of Health (NSWDH) and Community Services has generated research that suggests that not only parents, but also siblings, can be influential on adolescents’ likelihood to use and abuse alcohol (New South Wales Department of Health, 1993).

Boyd, et al. (1995) and Windle (1996) believe that parents who display appropriate attitudes towards alcohol and its use are more likely to provide a better climate for their children to develop required attitudes and patterns of behaviour. Goleman (1995) for example suggests the appropriate behaviour adults can demonstrate with alcohol in front of their children might include monitoring their own alcohol intake to avoid intoxication, counselling children on the appropriate use and restraint with alcohol and importantly “not demonstrating in front of children the use of alcohol as a coping device in life” (p.278). Goleman asserts that good parenting can help in preventing adolescents from growing into adults who misuse alcohol as a response to the challenges and changes of life. Goleman (1995) goes on to suggest that an “individual’s earliest experiences in upbringing can increase their chances of premature use and misuse of alcohol” (p.279).

This belief in the value of parents and family in influencing adolescents was instrumental in the decision by policy makers in Australia to develop their most recent promotional messages. The Commonwealth Government for example, implemented their 2001 *‘Tough on Drugs’* campaign as a strategy that would be spearheaded in homes around Australia by parents talking to their children about drugs. This campaign advocates a zero tolerance on drugs and emphasises this belief

in the vital role parents can have in steering young people away from a lifestyle that includes drug usage.

Peer groups have been repeatedly identified as being a primary influence in determining adolescent attitudes and behaviours and as such, have been identified as being influential on adolescents' decision whether to drink alcohol (Coleman, 1961; Sherif & Sherif, 1964; Brown, 1990; Fine, Mortimer & Roberts, 1990; Savin-Williams & Berndt, 1990; Montonen, 1997; Cox & Cox, 1998). Particularly during adolescence peers can be highly valued as they are models that the adolescent can compare themselves by.

For many adolescents, relations with friends represent critical interpersonal bridges that move them toward psychological growth and social maturity (Savin-Williams, 1990). Research by Kandel (1986) indicated that while parents influence on adolescents are indeed strong with regards to such issues as basic values and future life goals, the strongest influence on current lifestyles comes from peers. It is therefore probably not surprising that adolescents tend to drink alcohol together in private, as a leisure activity “where peers represent a supportive audience during experimentation” (Broadbent, 1994, p.33). This peer support during adolescence when experimentation occurs represents in this sense a “staging area” in which crucial themes of age and gender are acted out (Fine et al., 1990) and this interaction “serves to mediate the transition to adulthood” (Kleiber & Rickards, 1985).

Adolescents develop strong bonds with peers during this period of development because they feel they are trying to break free from adult mores' and control and therefore, his or her “*agemates*” become the only ones that understand them (Sherif & Sherif, 1964). This assertion may lead to associated behaviours that are, for their age, acceptable or unacceptable to parents. For example, this may include smoking, drinking alcohol, regulating their own time schedules, choosing

their own friends, seeking access to a car and other instrumentalities, sexual experimentation, and drug addiction (Sherif & Sherif, 1964).

McCallum (1994) suggests the debate over who influences adolescent drug use the most, the peer or parent, “has turned out to be almost as controversial and unresolved as the nature versus nurture debate” (McCallum, 1994, p.36). In conflict with the views of Kandel (1986), McCallum (1994) suggests that the relationship between family factors and the use and abuse of drugs among adolescents is the conclusive factor here. In support of McCallum, Boyd, Howard and Zucker (1995), maintain that regardless of race or other socio-demographic factors, the quality of parenting has proven to be a critically important influence on adolescent drinking behaviour. Adolescents who have a close relationship with their parents, who have feelings of comfort and belonging, feel loved and accepted, report lower alcohol and other drug use (McCallum, 1994). Similarly, having parents who are controlling, rejecting and/or emotionally cold is a significant predictor of adolescent problem behaviour including drug use (Jackson, Henriksen, & Dickinson, 1999). A brief discussion on adolescents and advertising follows.

2.3 Adolescents and Advertising

U.S. researchers Moore and Moschis, commented as far back as 1978, that the debate over the “powers” of mass advertising had existed for decades. It was believed that the impetus for a greater understanding of the effects of advertising came from various consumer groups who were concerned about the effects that marketing, particularly on the television, had on young people (Moore & Moschis, 1978). More specifically, concerns exist into the possibly negative impact alcohol advertising might be having on the attitudes and behaviours on children and adolescents where alcohol is concerned (Wyllie, Zhang & Casswell, 1998).

Therefore, with this growing concern about the fairness of advertising that is targeted at young children and adolescents there has been an increase in public concern about advertising (Roedder, 1981; Wyllie, Zhang & Casswell, 1998). As a response to this, public policy makers have been charged with the responsibility of trying to find out more about advertising and its likely effects on adolescents and other consumers (Roedder, 1981; Wyllie, Zhang & Casswell, 1998).

The most prevalent argument regarding the effectiveness of advertising on adolescents seems to centre around the belief that adolescents are very vulnerable to image based advertising. Evidence has been presented to suggest that the images in alcohol advertisements are particularly appealing to younger audiences (Strickland, 1982; Atkin, 1987; Casswell, 1995a; Grube & Wallack, 1994; Slater et al., 1996a; Perry, 1998; Oddy & Hawks, 1997; Wyllie et al., 1997; National Expert Authority Committee on Alcohol, 2000). Marketers for example seem to favour a method of advertising that uses classical conditioning, as a type of behavioural learning approach that can influence their audiences, “particularly in low involvement situations” (Rossiter & Percy, 1996, p.213).

Belch and Belch (2003) explain classical conditioning as an associative process whereby a relationship is established between two stimulus objects through the pairing of the two objects and through advertising repetition. For example, in the case of alcohol advertising, adolescents will be exposed to the advertisement and probably inadvertently process the commercials in the same way adults are intended to process the advertisement. They might see the unconditionally positive stimulus (US) such as the impressive sporting hero's, or a popular socialiser, or the beautiful women, or the beautiful home or place - paired with the brand of alcoholic beverage, the conditioned stimulus (CS) and over time, through continued repetition, the alcohol takes on all or some of the qualities and feelings of these unconditional stimuli.

So in the case of these types of advertising methods, researchers such as Strickland, Finn and Lambert, (1982) and Atkin, Neuendorf and McDermott (1983) believe that the residual effect of this type of advertising on its audience is that the alcohol advertising positively associates drinking with personal attributes, such as sociability, elegance, and physical attractiveness, as well as with desirable outcomes such as success, relaxation, romance, and adventure. More recent research by authors such Smart (1988), Wyllie, Caswell and Stewart (1991), Wyllie, et al. (1997), Kelly and Edwards (1998), Slater, et al. (1996) and Williams and Perry (1998) seems to support these earlier findings suggesting a general consensus that the imagery of alcohol advertising was likely to be very persuasive on young people. This area will be discussed in further detail in section 2.7 of this dissertation.

A review of the popular literature on this subject suggests that arguments about the effects of advertising on adolescents can differ substantially between different interest groups. For example, there are advertising critics as well as supporters. Advertising critics might contend that advertising strongly influences adolescents and results in “undesirable” socialisation (Moore & Moschis, 1978). This belief is supported by a number of researchers in spite of the widely accepted view that by early adolescents young people are now able to think about the ideas that are presented to them in television advertising and reason with the validity and truthfulness of these communication (Wackman & Wartella, 1977; Moschis & Churchill, 1979; Linn, Delucchi & deBenedictis, 1982; Mangleburg & Bristol, 1998). Linn, Delucchi and deBenedicts (1984) do however point out that while adolescents may be able to reason with relevance and importance of advertising claims they may still fail to do this. They suggest that “if advertisers encourage adolescents to adopt irrelevant criteria such as a social psychological criteria, using ‘feel good ads’ these may impair rational decision making” (p.372). Thus, it’s suggested that advertisers still have the ability to use advertising tactics that can undermine adolescent ability to effectively assess advertising claims.

Defenders of advertising practices have presented evidence and debate to suggest that the family is primarily responsible for what young people learn about consumption behaviour, and that “advertising simply sets the agenda for positive parent child interaction and provides consumption-learning experiences for the child” (Robertson, 1972, p.39). The advertising industry has claimed that alcohol advertising merely encourages existing drinkers to change or maintain their brand preferences rather than influences people to drink alcohol (Aitken et al., 1988). Researchers such as Wyllie, et al. (1998) respond to this position by acknowledging that “while alcohol advertising may not deliberately be targeting children and adolescents, there appears to be a number of ways in which alcohol advertising is linked with outcomes that are valued by them” (p.362). Thus the assertion here is that alcohol advertising has the potential to be influential because adolescents may see the characters in advertising and consider drinking alcohol to be, very macho or so that they can have as much fun as the characters presented (Linn, et al.). The discussion to follow covers some of the likely affects alcohol advertising might have on adolescents.

Previous research into children’s reactions to television advertising has identified young children’s difficulties in understanding and processing of advertising messages. However it has also been found that this ability to understand and process advertisements improves as the children get older and move through adolescence (Roedder, 1981). Roedder (1981) found that as children aged into their teenage years they became adept at remembering information they saw while watching television and they were also more able to process this information.

Adolescents appear to have a good memory for advertising and advertising claims and this remains true until they reach young adulthood. Dubow (1995) asserts that “advertising research practitioners have long known that memory for advertising varies as a function of age where younger people [adolescents] remember advertising better than older people” (p.55). After compiling an extremely comprehensive literature review, Dubow concluded that the data consistently showed that memory

for advertising varies according to age, “where young adults have a better memory than older adults, and teenagers remember advertising better than young adults” (1995, p.57). Dubow’s study also determined that these figures remain valid whether the researcher is assessing general awareness, day-after-recall, brand recall or brand recognition.

It is thought that younger children experience difficulty in processing the *central persuasive arguments* advanced in commercial messages, and they appear to process the information *peripheral* to commercial content (Linn et al. 1984; Wyllie et al. 1998). These findings might suggest that children and early-adolescents will tend towards processing information in a manner where image and drama are the important stimulus or cues rather than other more useful ‘informative’ stimulus. Petty and Cacioppo’s Elaboration Likelihood Model has captured this ‘*peripheral*’ and ‘*central*’ route to the information processing dynamic (Petty & Cacioppo, 1981). Studies by Piaget (1957) have suggested that “by early adolescence, adolescents reach a cognitive stage of *formal operation* and have the ability to think in abstract ways and reason, using all possible information contained in a stimulus” (Cited in Wackman & Wartella, 1979, p.144). Supporting, this research by Roedder (1981) found that as children aged, they retained less irrelevant information and retained more relevant and useful material. In this study Roedder (1981) defined the retention of material that is relevant to task performance as *central learning*, whereas information that is irrelevant is termed as *incidental learning*. These findings are important for advertisers because they verify that by the time adolescence occurs, young people are able to identify relevant and increasingly sophisticated content in a message (Roedder, 1981).

Not only does attention to advertising vary with age but some evidence suggests that so does the believability and influence of advertising. Moschis and Churchill (1979) concluded that the older the adolescent, the more resistant they became to advertising. Their findings suggested that as adolescents aged, they became more sophisticated consumers who are more inclined to consult several

sources of consumer information prior to decision making (Moschis & Churchill, 1979). Research by Moore and Moschis (1978) determined that 'grade-in-school' is also a significant predictor of susceptibility to advertising, suggesting that adolescents become less susceptible to advertising with age. Specifically looking at alcohol advertising, Wyllie et al. concluded from their study that younger boys found advertising more believable than older boys. This study looked at two different age groups, one 10-13 year-old group and another 14-17 year-old group and determined that alcohol advertising was an important source of advertising for the younger group of boys.

Memory, storage and retrieval of advertised information also seem to improve with age (Roedder, 1981). For example, research by Mizerski (1995) concluded that memory of advertised trade characters tended to improve in line with a child's age. Research by Moschis and Churchill (1979) also found evidence to suggest gender differences exist in advertising content retention levels. For example, female adolescents appear to retain product attribute information to a greater extent than do their male counterparts, and they could also be more receptive to comparative advertising.

Moschis and Churchill (1979) found evidence to suggest that socio-economic status and the interaction of one's age had an effect on adolescents' A_{ad} . They found evidence to suggest middle class adolescents' attitudes to advertising were less favourable than were their lower class counterparts. This attitude remained relatively stable although their favourable attitude to advertising did also appear to decline further as they aged. Moschis and Churchill (1979) also found a significant interaction between sex and social class with regards to the adolescent's ability to cognitively discriminate and retain advertising information. For example, females were found to be better able to do this. Further, while this ability remains fairly stable for males across social class, middle class females are better able to cognitively differentiate and retain information from television commercials compared to their lower class counterparts.

Other research by Linn, et al. into adolescent reasoning of scientific claims in advertising, returned data that suggested adolescents may have difficulty separating puffery from substantiated advertisement claims at least when considering whether advertisers need evidence for their claims. Adolescents also appeared to be responsive to claims made in ‘tests’ presented by advertisers, even though they may be irrelevant (Lin, et al.). In addition to this, Linn et al. found evidence to suggest that when adolescents are presented with multiple advertising claims, they change their product criteria frequently and can lose track of their own purchasing decision criteria. Advertising claims may also encourage adolescents to inadvertently add criteria to those they consider when making a brand decision (Linn et al.). Adler (1994) suggest that through the actions of advertisers bombarding adolescents with more product claims adolescents may find themselves indeed changing evaluation criteria. In light of these result on advertising tactics Adler suggests advertisers might use this knowledge “to exploit adolescents vulnerability at processing information, which in turn, may create inappropriate needs and wants” (1994, p.73).

Certain advertising-related cognitions may be developed as a result of the adolescent’s interaction with various socialisation agents (Moore & Moschis, 1978). Socialisation is the process by which young people acquire skills, knowledge, and attitudes relevant to their functioning as consumers in the marketplace (Ward, 1974). Socialisation agents might include family, peers and media such as that seen on television. For example, attitudes toward advertising, cognitive recall of television advertising, and perceived credibility of advertising in various media were found to be differentially related to the amount of time an adolescent viewed television and communicated about consumption matters with parents and peers (Ward & Wackman, 1971).

Research by Moore and Moschis (1978) found adolescent consumption behaviour and motivations for consumption are most heavily influenced by parent to

adolescent interaction rather than time watching television. At odds with the earlier findings of Ward and Wackman (1971), Moore and Moschis (1978) suggested the length of time watching or *mere exposure* to television (and hence advertisements) did not have a significant short-term effect on anticipated or actual consumption behaviour and motives. This *mere exposure* concept is based on the earlier research by Zajonc (1968) who suggested that *familiarity to a stimuli* is enough to create a positive attitude toward it. In contrast to these findings, Mandelburg and Bristol (1998) found evidence to suggest that the amount of time adolescents are exposed to television may be related to the development of sceptical attitudes toward advertising. Scepticism was defined by Boush, et al. (1994) in their study as being “whether respondents approach advertisements with an informed discerning mind or are predisposed to reject or to believe whatever is shown on television” (p.171). Mandelburg and Bristol (1998) concluded that their findings may in part be because the amount of exposure adolescent subjects have to television advertising may give them more experience as to the claims advertisers make, making them more able to judge the veracity of the advertising claims.

Moore and Moschis (1978) concluded that there was little support for the assertion by advertising critics that advertising is powerful in shaping adolescent consumer behaviour. Instead they asserted that interpersonal communication variables were better correlated with their criterion variables. Like other researchers since, Moore and Moschis (1978) concluded that learning of various kinds of orientations toward advertising and consumer behaviour may be mainly a social process, with significant others serving as important sources of consumer information.

It is generally accepted that the socialisation process has the potential to affect adolescents’ scepticism towards advertising (Moore & Moschis, 1978; Boush et al., 1994; Mangleburg & Bristol, 1998). It has been found that “even though adolescents might accept advertisers’ claims, they may still have a general feeling of scepticism towards advertising messages where they suspect or presume advertisers’

communications are biased and varied in their truthfulness” (Linn et al., 1984; Moschis & Churchill, 1979). Scepticism toward advertising might usually be considered a positive consumer skill for young consumers to acquire because it can help them to make wiser or more informed purchase decisions rather than accepting claims at face value (Mangleburg & Bristol, 1998). However, when trying to promote a health promotion message this scepticism towards advertising may introduce *psychological noise* into the communication channel that may in affect, hamper effective communication. Obviously this comes as an important revelation for any advertiser or health promotion strategist wanting to communicate to this adolescent target group. For example, Mangleburg and Bristol (1998) made the observation that “adolescents are already as sceptical of advertiser’s motives as could be reasonably expected” (p.17).

Other research regarding adolescent socialisation suggests that the frequency of communication with peers can be associated positively with adolescents’ ability to filter puffery in advertisements (Moore & Moschis, 1978). However, the evidence might seem to suggest that while adolescents are very aware of puffery, they are still influenced by it (Linn et al, 1984). Similarly, Boush, et al. (1994) found evidence to suggest that adolescents’ conformity with peers and trust in advertising were positively related and as might be expected, susceptibility to peer influence is related negatively to scepticism of advertising. Conflicting data were however found in the study by Boush, et al. (1994). For example, in this study items were combined from earlier research by Bearden, Netemeyer and Teel (1989) to compare susceptibility to peer normative and informational influences and they found that susceptibility to influence was related negatively to disbelief in advertising, as expected, but positively related to mistrust of advertising motives.

Research by Mangleburg and Bristol (1998) investigated whether the socialisation process is responsible for adolescent consumers’ acquisition of skills that enable scepticism to be applied to advertising communication. Their research concluded that scepticism toward advertising was an attitude learned through

interaction with parents, peers and television. In particular, *concept orientated family* communication, susceptibility to peer influence, and extent of television viewing enhance scepticism. Concept orientated families can be defined as “families that encourage children to develop their own views of the world and to consider alternative points of view, thereby fostering “development of children’s own skills and competence as consumers” (Carlson, Grossbart & Stuenkel, 1992, p.16). Mangelburg and Bristol (1998) suggested that this scepticism toward advertising was likely to be there largely because of the individuals’ positive marketplace knowledge that may have been acquired through their parents, peers and the advertising itself.

Moschis and Moore (1982) conducted research to determine longitudinal effects of television advertising on adolescents. The data suggested that television advertising may have both short-term and long-term effects on consumer socialisation, although the long term effects may be few. The results suggest interpersonal processes involving parents and peers may condition an adolescent’s attention to and learning from television commercials, resulting in both negative and positive socialisation. For example, the interactions on consumer role perceptions are significant only in the short-run and only among adolescents who watch television frequently (Moschis & Moore, 1983). The data also suggested that interaction effects are also likely to increase the adolescent’s propensity to perform socially acceptable consumer behaviours in the short-run in the presence of heavy television advertising viewing. This tentative finding may be relevant to this proposed study as it could be related to an adolescents’ consumption of adult-only products such as drinking alcohol. In addition to these other findings Moschis and Moore (1982) made the observation that the long-run effects of family communications on the adolescent’s ability to buy and use products and services in a rational and efficient way are more likely to be enhanced in the absence of television advertising viewing.

2.4 Advertising and Health Promotion Practices to Help Reduce Binge Drinking in Adolescence

Social behaviour marketing is the design, implementation, and control of programs designed to ultimately influence individual behaviour in ways that the marketer believes are in the individual or society's best interests (Andreasson & Belk, 1979). Intervention techniques using health promotion communications fall under the umbrella of social marketing or social behaviour marketing (Solomon, 1992). Where problems occur such as adolescent binge drinking, marketing communications are often used to shape attitudes and behaviours in an attempt *to de-market* problematic consumption patterns (Solomon, 1999). Health promotion advertising is likely to be part of a wider health promotion campaign that attempts to alter attitudes and behaviours of members of society for the betterment of that society. Recycling, saving water, sun protection, the reduction of drink driving, safe sex and the reduction of adolescent binge drinking are all topics that might at different times attract attention. These campaigns try to persuade others (the target adopters) to "accept, modify, or abandon certain ideas, attitudes, practices and behaviour" (Kotler & Roberto, 1989, p.6).

Increasingly in countries such as Australia there has been concerns about the use of both legal and illegal drugs by adolescents and young adults. In response to these concerns State, Territory and Commonwealth Governments in Australia are putting more emphasis and funding into addressing the problem (MacDonald, 1999). One way of addressing the problem is through the use of comprehensive public education programs within the community. In recent years, Australia health authorities have taken an integrated marketing communications approach to their marketing communications. Belch and Belch (2001) describe the integrated marketing communications approach as being:

"A concept of marketing communications planning that recognises the added value of a comprehensive plan that evaluates the strategic roles of

a variety of communication disciplines-for example, general advertising, direct responses, sales promotion, and public relations-and combines these disciplines to provide clarity, consistency, and maximum communications impact” (p.GL7).

Strategies that have been used include the use of mass media such as television and radio campaigns, the use of printed materials, the setting up of information networks and the implementation of various school programmes. Health authorities have also used a number of different anti-binge drinking representatives such as health workers, law enforcement officers and representatives from the alcohol beverages and hospitality industry to relay information on alcohol (National Expert Authority Committee on Alcohol, 2000). To reduce the harm alcohol might cause to young people in the community schools have included workshops into their curriculum that advise students on how they might better use techniques to for example: decline a lift home with a drunken friend; stop a friend from starting a drunken fight; avoid sexually compromising situations; or come to the aid of a friend unconscious from the effects of alcohol (Ford, 1996). Current initiatives by government, non-governments, and the alcohol beverages and hospitality industry in Australia aim to:

- Increase the community’s understanding of health issues related to alcohol
- Convey guidelines for responsible drinking practice
- Raise awareness of the social and legal implications of excessive alcohol consumption to the individual and the impact it has on other people
- Identify avenues for effecting changes regarding the sale or promotion of alcohol.

(National Expert Authority Committee on Alcohol, 2000)

Advertising plays a large part in health promotion and it is believed to have beneficial effects on adolescents (Atkin, 1993). In spite of it’s beneficial effects,

relatively little research has evaluated the effectiveness of health promotion alcohol campaigns with adolescents (Atkin, 1993). Atkin suggests that instead, the emphasis appears to be on evaluating the effects of pro-alcohol advertising on adolescents. A review of the most recent Australian literature seems to suggest little has changed. Perhaps this is because dedicated health promotion advertising campaigns targeted at 13-17 year old adolescents about binge drinking are still a fairly new concept. Despite the ongoing and long-term problem of adolescent binge drinking within the Australian community, it appears that it was not until the mid-to-late 1990's that Government agencies set out to specifically communicate with 13-17 year-old adolescents. Prior to this time communications to reduce binge drinking in the young were designed with 18-25 year-olds in mind. Any spill over exposure into the younger, adolescent group was more likely to be seen as a bonus to health promotion campaigners rather than a targeted outcome. The two most notable campaigns to be run in Western Australia in recent years have been:

- 1) The Health Department Western Australia's, Health Promotion Services, "Respect Yourself" state campaign, branded as *"100% Control,"* launched in April 1997"

* This campaign was an initiative under the former National Alcohol Action Plan 1995-1997.

- 2) The Commonwealth Government's National Alcohol Campaign, branded *"Choices – Where are Yours Taking You?"* This campaign was launched in 2000 and replaced the State run campaign *'100% in Control.'*

* This is an initiative under the current National Drug Strategic Framework 1998-99 to 2002-03.

The "100% Control" campaign targeted a number of groups as well as indigenous youth, all aged between 15-25 using different advertisements and marketing communications media that were specific to the target group. Viewing materials from this campaign, the major emphasis of these communications did appear to be the 18 – 25 year old group. The "Choices – Where are Yours Taking You?" campaign by contrast, was directly focussed at the 15-17 age group. The 12-17 years and 18-24 years groups along with parents were said to be secondary targets

for this campaign (Commonwealth Government Media Kit, 2002, www.health.gov.au/pubhlth/alcoholcampaign).

In its broadest sense, there are two categories of advertising appeals that are generally used in advertising these being the *informational/rational appeals* and the *emotional appeals* (Belch & Belch, 2001). “Rational advertisements are those that try to appeal to the logical, rational side of the audience whereas emotional advertising tends to try to appeal to the emotions or feelings” (Belch & Belch, 2001, G11). Communications targeted at adolescent drinkers have in the past tended to target the emotions. Mizerski and White (1986) note that emotions can directly influence attitudes. According to the experiential hierarchy of effects model, consumers may act on the bases of their emotional reactions to a product or its advertising (Solomon, 1999). Solomon (2002) points out that the goal of emotional advertising appeals is to establish a connection between the product and the consumer, a strategy known as *bonding*.

Solomon suggests attitudes can be strongly influenced through consumers’ reactions to advertising stimuli and the nature of the setting in which the experience occurs. Emotional appeals have the potential to increase the chance that the message will be thoroughly understood. “These types of appeals may be more likely to be retained in the memory, and they can also increase the consumer’s involvement with the product” (Solomon, 2002, p.240). Belch and Belch (1999) suggest another advantage of emotional advertising is that “*transformational* advertising can occur through the use of appropriately crafted communications” (p.278).

Transformational advertisements are those emotional appeals that associate the experience of using the product with a unique set of psychological characteristics that would not typically be associated with the product experience to the same degree without exposure to the advertisement (Belch & Belch, 2001). For example, transformational advertising is in use when showing the glamour of women’s fashion

or fragrances or where the experience of driving a new sports car shows the driver briskly traversing forestry roads with a fantasy partner. In the context of adolescent binge drinking, transformational advertising appeals might include images that for example vicariously transfer the negative experiences that might occur to the individual when they misuse alcohol. By taking an approach such as shocking adolescents or perhaps conversely by enticing adolescents with positive outcomes, health promotions authorities might therefore be able to create a positive impact on an adolescent.

This is particularly important with the current crop of adolescents who fall into a group called generation Y. Generation Y adolescents are those people who were born within the generation, 1979 to 1994 (Solomon, 2002). Generation Y adolescents are said to be a particularly hard group to have to communicate with. It's been said that they are very media literate and as a consequence are discriminating and quickly bored with marketing communications such as mass media advertising (Khermouch & Green, 2001). They have been reported as being part of a "materialistic and cynical generation," but also as "a generation of idealists intent on changing the world" (Warlhaft, 2000). Miller (1994) suggests that they can be expected to know what is "phat" [or cool] and what is not and "they can be expected to have feelings that tell them that a lot of advertising is based on lies and hype" (p.6). Research by Mangleburg and Bristol (1998) supported this view finding evidence to suggest that as a general rule, the current crop of adolescents were quite wary of advertisers' motives and advertising appeals. Burn and Thompson (1998) also suggested that they often doubting the credibility of communications and questioning their relevance to them personally.

Marketers recognise that to penetrate the scepticism and capture the attention of generation Y, they have to bring their messages to these people in a different and more innovative way than they may have in the past (Khermouch & Green, 2001). Emotional advertising using transformational appeals is therefore perhaps just one response to this need for innovative communication. Health authorities have used

transformational advertisements presumably with the expectation of ultimately creating feelings, images, meanings, and beliefs about the cause in a way that has an impact on adolescents. Belch and Belch (2001) suggest these “feelings can be activated when consumers use the product or brand,” or in this particular case, they can be activated when they contemplate the behaviour (p.278). This approach to communication is also said to offer the advertising qualities of permanence in its affect, salience in the memory and timeliness of the communication (Solomon, 1999; Belch & Belch, 2001).

All of the above are qualities that might be considered desirable when trying to influence young drinkers. The two previously discussed health authority anti-binge drinking campaigns both used transformational appeals that demonstrated to their adolescent audiences the social and physical harm that can occur where there is a lack of restraint used by the young drinkers. These appeals also used behavioural learning methods that are intended to condition the audience in such a way as to shape future behaviour when in settings where alcohol is in use. This area will be expanded upon in the upcoming sections of this dissertation.

Burns and Thompson (1998) conducted a literature review covering a number of previous studies into adolescent drinkers and alcohol restraint communications. In summarising their review they came to the realisation that not only were generation Y a difficult group to communicate to in general terms, but they also had a distinct set of prevailing attitudes with regards external communications aimed personally at them as well as contradicting views on the way they should personally use alcohol. This realisation made it apparent that it was always going to be a particularly challenging task to talk to adolescents about alcohol restraint (Burns & Thompson, 1998). For example, research was presented that indicated that adolescents do not like people telling them what to do, particularly where the advice is coming from those who are in a position of authority (Lilley, 1995; Broadbent, 1996, Health Promotion Services, 1997b). Adolescents instead wanted advertising and other communications to “speak to them from within their world in ways that are

credible, yet-non-judgemental” (Burns & Thompson, 1998, p.110). Also problematic, it appears that adolescents have contradicting views about how they place value on alcohol and how they choose to use alcohol, for example, research has suggested that:

- Adolescents believe the worst thing about drinking alcohol is *losing control* and adolescents are for the most part, aware of the myriad of negative outcomes that can arise as a result of losing control.
- By contrast, adolescents in Australia report that when they are drinking alcohol they do so “with an intention or expectation to get drunk, and quickly, on most drinking occasions.” In other words, they drink to get *out of control*.

(Health Promotion Services, 1996a; Shanahan & Hewitt, 1999)

Shanahan and Hewitt (1999) found that approximately two out of every three adolescents reported that they felt that ‘ending up out of control’ was a negative experience yet they also reported that getting out of control was their key objective in drinking alcohol. This contradiction in values and behaviours underlines what must surely be considered a very perplexing problem for health promotion campaigners. Within the adolescent target audience their lay conflicting attitudes as to the role alcohol should take in their lives.

In spite of contradictions such as these, health promotion campaigners continue to design and executed health promotion advertising in an effort to influence the choices of their adolescent audience. For example in 1997, the Western Australian government introduced its “*100% in Control*” campaign, and more recently in 2000, the Commonwealth Government released it’s “*Choices, Where are Yours Taking You?*” campaign. These fear and combination fear / success advertising executions had as their ‘major selling idea,’ a number of negative but realistic outcomes that might come about from the misuse of alcohol. For example these advertisements demonstrate scenarios where the young person misuses alcohol

and as a consequence embarrassment, humiliation and injury occur. These advertisements depict scenarios where for example anti-social behaviours occur, friends are alienated, fights and physical injuries break out, opportunities for romance are squandered and unwanted and unsafe sex take place. In these advertisements, the focus is on the “out of control adolescent” as opposed to the “in-control” adolescent where positive outcomes are contrasted against those negative outcomes that were just described.

This previous advertising approach has probably been used in light of the general understanding by health promotion planners that contradicting attitudes exist within the minds of adolescents toward alcohol use. For example, this execution style is not only responsive to adolescent concerns about the negative side of ‘losing control’ but this execution style is non-judgemental in that it implicitly accepts that adolescents often will enjoy and seek out the effects of alcohol. The theme therefore appears to be that one can choose to ‘loosen control’ but do not let yourself lose control because you are highly likely to pay a high social or physical price. By taking this approach, health promotion authorities are implicitly highlighting the desirability of adolescents either choosing not to drink at all or more realistically, only drinking if they intend using restraint.

The 1997 “*100 Per Cent Control*” was one campaign where the negative effects of drinking too much alcohol were demonstrated in a creative backdrop that also included other adolescents implicitly using restraint with their drinking. This campaign seemed to be successful in early tracking studies for example, the data suggested the advertisement achieved a high unprompted recall and it evoked a high perceived relevance figure in those targeted age-groups (Carroll, Lum, Taylor & Travia, 2000). Research by Carroll, et al. (2000) indicated that “69 per cent of 12 to 13 year-olds respondents felt since seeing the advertisements, binge drinking was now seen as being less appealing to them” (p.9). Furthermore, “50 per cent of 14 to 16 year-olds who were said to be ‘at risk’ drinkers said binge drinking was less appealing to them following the campaign” (Carroll et al., p.7).

The advertisements that have been discussed are good examples of an approach to health promotion known as “harm minimisation”. The harm minimisation approach has in recent years become the philosophical framework of many drug educators (MacDonald, 1999) and appears popular too in countries like Australia and in Europe although it has been less popular in the United States (Single, 1996). Harm minimisation continues to be the primary objective underpinning the Australian National Drug Strategy (National Expert Authority Committee on Alcohol, 2000). It has been said that “harm minimisation is consistent with a comprehensive approach to drug-related harm, involving a balance between demand reduction, supply reduction and harm reduction” (National Expert Authority Committee on Alcohol, 2000, p.66). Single (1996) states the defining features of harm minimisation strategies are that they attempt to minimise the negative consequences of alcohol consumption in situations where it is accepted that people will be drinking. Harm minimisation would for example accept the fact that under age drinking will occur and health promotion authorities would voice neither approval or disapproval of this but they would hold that the drinker is responsible for his or her actions (MacDonald, 1999).

This harm minimisation approach is thought to be in-touch with the prevailing attitudes and major concerns of young people (Wood, 1995; Lilley, 1995). It takes a position that accepts the reality of adolescents’ drinking and the likely consumer behaviour that occurs, and tries to get across the take-home-message to adolescents of “yes, you’ve got a point” in suggesting “I should keep [my drinking] under control” (Lilley, 1995, p.33). In communications using this approach, the unequivocal message has to be that ‘drinking less is better’ (Single, 1990).

Using this approach, promotional materials communicate an acceptance that alcohol is likely to be consumed by underage drinkers. This is because realistically, in Australian society, it is likely to be a fruitless exercise to undertake campaigns telling mid-to-late teenagers to abstain if they are unlikely to do so (Atkin, 1993).

Advertisements, brochures and other materials are therefore often designed to be informational, non-judgemental, and sensitive to the needs of adolescents and their parents. They take on a tone suggested to be necessary by researchers such as Carroll and Thompson (1998) who advocate that the tone should be one “where the communication vehicle speaks *with* adolescents rather than *to* adolescents” (p.161). Today, most adults have come to accept the wisdom of harm minimisation strategies (MacDonald, 1999).

Some however, might argue that the harm minimisation model is a philosophically flawed model because it sends out the wrong signals to its target audiences (Single, 1996; McDonald, 1999). Critics may argue that harm minimisation suggests that alcohol and other drug use is prevalent and the norm during adolescence, when perhaps this is an overstatement that puts further pressure on young people to comply with inaccurate adolescent societal norms suggests (Single, 1996). Similarly, Margaret McDonald, Director of Alcohol and Other Illicit Drugs Policy in the Drugs of Dependence Branch, Commonwealth Department of Health, Housing and Human Services, acknowledges the need for harm reduction campaigns such as “100% in Control,” but she feels the message should also include a stronger abstinence message. For example, McDonald (1995) believes “any approach that merely accepts that levels of drinking among young people as inevitable should be questioned”. “Current attitudes [adolescent attitudes] could stem from the fact that we seem to have normalised it so much that we’re even now saying to kids, ‘well, kids drink,’” she says (Cited in Wood, 1995).

McDonald suggests we need a harm minimisation approach, but people have forgotten the other end of the response spectrum that says to young people “try to delay the taking of drugs until people are old enough to make reasonable decisions”. Viewing the Commonwealth’s 1995 anti-binge drinking campaign, McDonald does not believe youth-orientated campaigns reinforce this option enough and that “the 60 per cent of very young people who choose not to drink also need support to maintain that position” (Cited in Wood, 1995). The next section of this dissertation looks into

the theory of adolescent thinking that might ultimately be relevant to the design of health promotion communications.

2.5 Understanding the Design of Health Promotion Communications

Designing a communications campaign targeted at school-aged adolescents is considered very difficult. Where campaigns are launched to address adolescent drinking behaviours, it has been said that messages and campaigns must be seen to speak from within the adolescent's world in ways that are credible, yet non-judgemental (Burns & Thompson, 1998). They must talk *to* the target audience, not *at* them. Furthermore, the communications must be as 'cool' as other communications they like. This is particularly true of those communications that promote alcohol and other drug use (Carroll, 1995). Research has suggested that any communications that talk to adolescents "have to communicate at a grass roots level, in a way that has integrity, credibility and relevance" (Carroll, 1995; Burns & Thompson, 1998; National Expert Authority Committee on Alcohol, 2000).

Adolescent target audiences have unique and dynamic cognitive processing capabilities that may influence responses to health promotion communications (Schoenbachler & Whittler, 1996). For example, Elkind (1967) suggests that adolescents fail to differentiate their own thoughts from thoughts of others, which leads to the development of two cognitive constructions: the *imaginary audience* and the *personal fable*. The imaginary audience is evident in actual or impending social situations, when the adolescent tries to anticipate the reactions of other people to himself or herself. These anticipations, however, are based on assumptions that others are as admiring or as critical of the individual as he/she is of himself or herself (Elkind, 1967). "The adolescent therefore believes he or she is the centre of attention, operating on a stage on which he or she is the principal actor, and the world the audience" (Looft, 1971, p.488).

When considering Elkind's theory one might argue that advertisements that depict different drinking portrayals take on the role of surrogates that can be used by adolescents to rehearse their own existing and future attitudes and behaviours towards alcohol. Certainly, those adolescent anti binge drinking advertising campaigns that have been mentioned previously in this dissertation all used actors who acted out drinking events. The process of watching the actions of others and assessing the reinforcement they receive is a type of *vicarious* learning known as "observational learning" (Berger, 1962). Mizerski and White (1986) described vicarious learning as a type of instrumental conditioning where the conditioning of the individual occurs indirectly through for example advertising. Solomon (1999) suggests this type of learning is a complex process whereby people store knowledge, perhaps using this information at a later point to guide their own behaviour. This process of imitating the behaviour of others is called "modelling." In order for modelling to occur, four conditions must be met:

- The consumer's attention must be directed to the appropriate model, who for reason of attractiveness, competence, status, or similarity they are desirable persons to emulate
- The consumer must remember what is said or done by the model
- The consumer must be motivated to perform these actions
- The consumer must convert this information into actions.

(Solomon, 1999)

While Elkind's theory on imaginary audience might further support the use of instrumental conditioning using vicarious learning by contrast, Elkind's other

cognitive construction “personal fable” might suggest adolescents may be as a general predisposition, disregarding of marketing communications. Elkind (1967) suggests that with personal fable the adolescent fails to differentiate between ideas that are unique and ideas that are universal in a particular construction. The adolescent’s failure to differentiate between ideas that are unique to the ‘self’ and those that are universal to mankind leads to a belief that the adolescent is immortal. With this mindset, he or she believes they are so special and so unique that although bad things happen to others, they will not happen to them (Elkind, 1967).

This aspect of personal fable can have negative consequences as it can allow adolescents to find themselves participating in negative behaviours. For example, the intoxicated adolescent might pick fights with friends or strangers without any consideration for the consequences. Even with the realisation that these things happen when others drink alcohol, the individual adolescent might drink alcohol without the expectation that there will be consequences such as those depicted in anti-binge drinking advertisements.

These two cognitive constructions may direct the repertoire of cognitive coping responses available to the adolescent. This is a particularly important revelation for health promotion campaigners who use threat advertising because coping responses need to be appropriate, rather than inappropriate. For example, where coping strategies are triggered by the threat communications, this may lead to unwanted “maladaptive learning” where adolescents adopt coping strategies that are not recommended by the communication (Schoenbachler & Whittler, 1996). Maladaptive learning or actions are those when consumers adopt cognitive behaviours such as denial, defensive avoidance, or reactance all of which might occur as a result of the communication rather than “adaptive” behaviours where the consumer adopts actions that will ultimately remove or negate the threat (Tripp, 1989; Witte et al., 1998). Therefore, the concept of personal fable provides responses [which are unhelpful] such as *“It will never happen to me”* that elude to a

sense of immortality that may influence adolescents' responses to threat communications.

The imaginary audience thoughts focus on what others, particularly peers, will think about the adolescent. Thoughts such as *"Imagine what will my friends think?"* exemplify this imaginary audience cognition. Thus, the social implications of coping response become important to communicators (Schoenbacher & Whittler, 1996). Elkind (1967) suggests that this is particularly true of adolescents because they are a group that can be characterised as being "very egocentric, concerned with their own wellbeing rather than that of others." Indeed, he suggests that where advertising is concerned, showing the likely negative effects of an adolescents actions on others is likely to be ineffective due to the overriding strength of adolescent egocentrism (Elkind, 1967). Perhaps then, one might argue that health promotion campaigns targeted to adolescents are best targeted at the individual's egocentric orientation of self-interest and concern rather than to their sense of concern for others or society.

With a general acceptance by health promotion planners that adolescents are primarily concerned about their own social and emotional wellbeing its probably not overly surprising that threat based communications have been widely used in Australia to communicate to adolescents about issues such as binge drinking. Because threat based advertising is so widely used by health promotion planners in Australia a discussion will now take place into the reasoning behind the use of this approach. Discussion will also focus on the techniques used by health promotions marketers to get the desired audience responses from their threat based advertising communications.

A threat based appeal is an approach used to generate fear in the receiver. In the case of health promotion it does this by using a communication stimuli that attempts to evoke a fear response by showing the audience a negative outcome that

occurs to oneself or others. This outcome, it is hoped will be processed by the audience as being an outcome they would rather avoid (LaTour & Rotfeld, 1997). Fear is the by-product of a threat and is an actual emotional response that can impel changes in attitude or behaviour intentions (LaTour & Rotfeld, 1997). Threatening images can reinforce avoidance of the threatening behaviours that result in the negative consequences. Conversely, threatening images can encourage approach to positive consequences to facilitate adoption of the more desirable behaviour. In an effort to cut-through to these egocentric adolescent audiences, alcohol abuse campaigns often use graphic images that threaten the audience to arouse fear in viewers about the impact of alcohol on their health and in particular, on the social wellbeing of the individual (National Expert Authority Committee on Alcohol, 2000). Note that in response to the egocentrism of adolescence, the emphasis on the harm that might occur is focused on the negative effects to oneself rather than others.

The more recent Australian communications aimed at adolescents are designed to facilitate fear through socially threatening outcomes where embarrassment, humiliation, and loss of friends are the key threats. Once presented with these images it would be anticipated that respondents would then take action to remove or reduce the risk. However, this may not always be the case as Tripp (1989) points out using the cigarette example. She suggests the process of changing behaviour is not just as simple as identifying a problem and then communicating an appropriate response to the target adopters.

Where threats in fear appeals are used to enhance effectiveness of health promotions it has been suggested that the persuasive effects of fear appeals can still be described as confused and confusing even after five decades of study (LaTour & Rotfeld, 1997; Tanner, Hunt & Eppright, 1991, Witte & Allen, 2000). This aside, “research does appear to support the use of threat based approaches to communication, accepting that it generally does work” (LaTour & Rotfeld, 1997, p.47). Demonstrating this, the repeated conclusion from research into threat based appeals has been that increases in fear are generally associated with changes in

behaviour, attitudes and intentions, though the relationships are sometimes small and less definitive for behaviour than intentions (LaTour & Rotfeld, 1997).

Egocentric threat executions are “ideally suited to the emotional and behavioural architecture of adolescents” (Elkind, 1967, p.1028). It is for this reason that one might explain why *social* threat communications have been identified as being more persuasive than physical threat communications when communicating to adolescents (Tanner, Hunt & Eppright, 1991; Shoenbachler & Whittler, 1996). Considerable research data now exists that is supportive of fear advertising appeals suggesting fear appeals in health promotion motivate behavioural change across a variety of behaviours. Despite this, some public health researchers and practitioners continue to contend that fear appeals are misunderstood (LaTour & Rotfeld, 1997) while others contend “they just do not work” (Tripp, 1989, p.24) or can backfire if not used correctly (Rogers, 1983; Witte & Allen, 2000).

Before deciding to use a fear appeal-based message strategy, the communicator should consider how fear operates, what level to use, and how different target audiences may respond (Belch & Belch, 2001). One early theory on this subject suggested that the relationship between the *level* of fear in a message and acceptance or persuasion is curvilinear (see curvilinear model Figure 2.1 to follow). This means the message and acceptance increases as the amount of fear used rises – to a point. Beyond that point, acceptance decreases as the level of fear rises (Ray & Wilkie, 1970). A low level of fear can have a facilitating effects; it attracts attention and interest in the message and may motivate the receiver to act to resolve the threat. Thus, increasing the level of fear in a message from low to moderate can result in increased persuasion. High levels of fear can however, produce inhibiting effects, where the receiver may emotionally block the message by tuning it out, perceiving it selectively, or denying its argument outright (Belch & Belch, 2001).

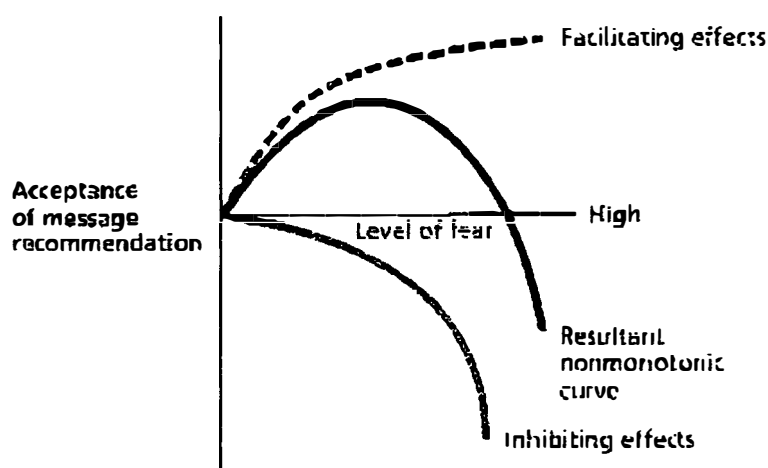


Figure 2.1: *The relationship between fear levels and message acceptance*

Source: Ray and Wilkie (1970). Fear: The Potential of an Appeal

Neglected by Marketing. *Journal of Marketing*, 34 (January), 54-62.

Supporting earlier research by Ray and Wilkie (1970), Keller and Block (1996) suggested that while low-level fear may work to a point, these appeals may be ineffective because they result in insufficient motivation to internalise and elaborate on the message. Building on the earlier research on the curvilinear explanation of fear Rogers (1983) developed his “protection motivation schema” that not only presented the reasoning in support of the use of high fear appeals but it also had explanatory power in explaining how fear does and does not work.

Rogers’s schema was the first to identify the components of fear appeal and the cognitive mediators leading to message acceptance (Witte & Allen, 2000). With this theory, Rogers considered fear to be a relational construct, aroused in response to a situation that is judged as dangerous and toward which protective action should be taken (p.157). Rogers (1983) accepted that if a persuasive communication arouses fear, people are motivated to reduce unpleasant drive states. This motivation facilitates a need for attitude change and the amount of attitude change depends on

the amount of drive reduction contiguous with rehearsal of the communicator's recommendations. Rogers's schema suggested "higher levels of fear resulted in too much elaboration where this in turn resulted in unhelpful defensive behaviour where the audience would avoid the message or selective perception of the message would occur" (1983, p.459).

Rogers's schema identified cognitive processes that mediate the effects of the components of fear appeals on attitudes by arousing what has been termed as "protection motivation." Protection motivation asserts that the intent to adopt the communicator's recommendations will be a function of the amount of protection motivation aroused (Rogers, 1983). Furthermore, the schema asserts that attitude change is not mediated by or as a result of an emotional state of fear, but rather is a function of the amount of protection motivation aroused by cognitive appraisal processes. The emphasis is thus on cognitive processes and protection motivation, rather than fear as an emotion (Rogers, 1983). According to this protection motivation theory, there are four crucial "stimulus variables" in fear appeals, these being:

- 1) The magnitude of the noxiousness of a depicted event (the severity of the threat)
- 2) The conditional probability that the event will occur provided that no adaptive behaviour is performed or there is no modification of an existing behavioural disposition
- 3) The availability and effectiveness of a coping response that might reduce or eliminate the noxious stimulus

- 4) The individual's perceived ability to carry out the coping behaviour, termed self-efficacy

(Rogers, 1983)

As Rogers's schema suggests, individuals can react differently to a communication and their subsequent responses can be either adaptive or maladaptive, or both. The schema suggests their reactions will be tempered by environmental and interpersonal factors such as those outlined above. Rogers's protection motivation schema has been an accepted cornerstone in the ongoing development of any framework that is designed to assist in the understanding of the dynamic of threat communications.

In response to any continuing ambiguity regarding the effectiveness of fear appeals and to summarise knowledge on the subject, Witte and Allen (2000) conducted a meta-analysis empirically evaluating the data from more than 100 fear appeals. The purpose of this study was to try and determine once and for all, whether fear appeals were really effective and if so, under what conditions, such as comparing high-fear versus low-fear. This study concluded again that there was compelling evidence in support of fear advertising. The clearest of the findings include the following:

- Level of fear, severity of outcome, susceptibility to outcome, degree of self-efficacy and response-efficacy *do* result in greater positive levels of attitude, intentions, and behavioural change
 - a. The stronger the fear appeal the greater the attitude, intention, and behavioural change
 - b. The stronger the severity and susceptibility in the message, the more attitude, intention, and behaviour is likely to change

- c. The stronger the response-efficacy and self-efficacy in a message, the stronger the attitudes, intentions, and behaviours will be toward the recommended response

Witte and Allen's (2000) review suggested that failure to respond to high fear appeals was more a function of the other components of the advertisement rather than just the threat. This study supported the earlier work by Rogers (1983) where he concluded that an advertising threat may not have seemed to be credible because the perceived probability of the consequence was low (susceptibility), or perhaps the advertisement was unsuccessful because the audience was not given a means to respond to the threat (efficacy). In concluding their meta-analysis Witte and Allen (2000) showed clear preference for the protection motivation model of Rogers. Witte and Allen (2000) summed up by saying that "while the protection motivation model failed to have explanatory power about when and how fear appeals fail, it did appear to do a good job of explaining when and why fear appeals do work" (p.594).

Many of Witte, et al.'s (2000) findings regarding efficacy and susceptibility were first identified in a previous 1998 study (Witte & Allen, 1998). At the conclusion of this study earlier occasion these researchers found their initial support for the validity of Roger's (1983). LaTour and Rotfeld (1997) similarly concluded that perceived self-efficacy was an important antecedent to fear appeal response. In addition to those previous findings, Witte and Allen (2000) made the observation that fear appeal manipulations appear to have improved over the years, given the correlation between year-of-study and manipulation effect. It was suggested this improvement probably stems from more precise message definition and more careful message construction. Witte and Allen (2000) summed up with the following recommendations for any health promotion campaigners who were in future contemplating using a fear approach in their advertising creative:

- Increase the references to the severity of the proposed threat (severity meaning - The magnitude of the threat)
- Increase the references to the target populations' susceptibility to the threat (susceptibility meaning - The likelihood of experiencing the threat)
- Messages with strong appeals that seem serious and likely to happen will be most motivating, whereas weak appeals will fail to facilitate behavioural change
- Strong fear appeals will work only when accompanied by equally strong efficacy messages

(Witte & Allen, 2000)

In conclusion, the recommendations of Witte, et al. (2000) are made to try and avoid advertising failure through those maladaptive actions that were previously recognised by (Schoenbacher & Whittler, 1996). It is believed that maladaptive actions are the reason why researchers often observe fear advertising techniques failing or in extreme cases, backfiring. For example Witte, et al. (1998) found evidence to suggest that fear appeal campaigns can produce multiple outcomes, some of which interfere with desired behaviour changes that may be sought. Demonstrating this, LaTour and Rotfeld (1997) suggest some receivers are sometimes given a lack of options within the communication to act on that communication that they have seen or heard.

In their later study Witte and Allen postulated that it is important to measure unintended outcomes (such as fear control response). For example, in the event of a campaign failure one can determine whether a campaign simply had:

- a) no effect (meaning that the perceived strength of the threat needs to be increased to motivate action) or;
- b) a strong effect of undesired fear control outcomes (meaning that efficacy messages need to be strengthened to promote suggested responses such as *denial*, *defensive avoidance*, and *reactance*)

This section of the dissertation has discussed how adolescents are likely to think of themselves and how they are likely to react to their world. Discussion ensued that took into consideration the implications of the adolescent mindset. The concept of instrumental learning and in particular vicarious learning was also raised and shall be discussed again in more detail in the upcoming section. It was explained that fear based advertising was popular in Australia and that it is often used by health promotion planners to communicate to adolescents about the misuse of alcohol. In particular fear based advertising was discussed with the appropriate application of fear based advertising in mind. The next section of this report discusses how reinforcement works in advertising. In particular instrumental conditioning will be revisited, and the previous discussion on this topic will now be broadened.

2.6 Operant Conditioning and Binge Drinking Advertising

The concept of classical conditioning has already been briefly discussed in the context of its ability to condition consumers to associate certain unrelated but positively valenced stimuli to another unrelated stimuli object. For example, where the product to be marketed, the conditional stimulus, is paired with a conditioned stimulus to attain a desirable consumer associations or beliefs about the marketer's product. The previously described examples of classical conditioning highlighted concerns that exist by a number of prominent academics and social commentators

both in Australia and overseas that adolescents were being conditioned throughout their lives from the earliest of ages to look at alcohol and alcohol consumption primarily in glowing terms. These beliefs come about from successive exposure to enticing imagery in alcohol advertising commercials that adolescents learn to *associate* with alcohol and alcohol consumption. Classical conditioning seems to be the technique most often used by marketers who are promoting pro-alcohol messages (Parsons, Rissel & Douglas, 1999; Austin, Weintraub & Kay, 1994; Kelly, & Edwards, 1998) whereas operant conditioning is often used in fear based communications as the voice of alcohol restraint (Burns, 1998). Operant conditioning will now be discussed so that its application in health promotion can be more fully understood.

Behavioural learning theory suggest that not only can classical conditioning be a way of shaping consumer behaviour but so too can operant or instrumental conditioning (Belch & Belch, 2003; Solomon, 2002). Shaping occurs when reinforcement schedules are applied by the marketer using successive acts for example, using repeated exposure to an advertising stimuli. Solomon (2002) suggests that as a consequence these communications lead to the desired behavioural pattern. Marketers attempt to provide their customers not only with goods and services that might reinforce the probability of repeat purchase but they also use reinforcement in advertising to encourage or discourage certain behaviours (Belch & Belch, 2003). In this dissertation it will be argued that health promotion authorities have in recent times used operant conditioning to try and shape the behaviour of their adolescent audiences with regards alcohol.

Previous discussions have suggested that at their most basic level anti-binge drinking advertisements may be used by adolescents for modelling purposes (Burns & Thompson, 1996). In this situation, the audience watches other adolescents use alcohol in order that they might determine whether by adopting their peer's behaviour they might also attain an ideal outcome for their imaginary self. Here they watch an actor behave in a certain way and as a result "operant conditioning theory"

suggests their environment reciprocates with either a pleasant or unpleasant outcome. Emotional advertisements might for example, use positive reinforcement advertisements that demonstrate how someone chooses not to get drunk and by making this decision they are able to present themselves more attractively to the world as a whole.

In affect, advertisers are trying to elicit the desired emotional state with their adolescent audiences through the demonstration of different desirable or undesirable outcomes. Mizerski and White (1986) point out that emotional advertising can clearly be effective in developing and perpetuating positive [and presumably negative] reactions to the product. While audiences can be conditioned to seek positive stimuli (or consequences) they can also be conditioned to take actions where they avoid or withdraw from behaviour that leads to unpleasant stimuli (or consequences). For the purpose of classifying the three advertisements that comprise the stimulus for the study it is important that operant conditioning is discussed and understood.

Operant conditioning is based on the earlier work of psychologists such as Edward Thorndike (1889) and B. F. Skinner (1969) (University of Western Australia, 1999; Huitt & Hummel, 1997). Thorndike and Skinner proposed that learning is the result of the application of consequences, that is, learners begin to connect certain responses with certain stimuli (Huitt & Hummel, 1997). Thorndike first labelled this type of learning as being instrumental. Using consequences, he taught kittens to manipulate a latch (the instrument) in return for rewards (food). Instrumental conditioning holds the belief that our actions are “instrumental” in producing whatever pleasant or painful consequences that follow (Chapa, 2001; University of Western Australia, 1999). Skinner renamed instrumental conditioning as operant conditioning because he believed this term was more descriptive explaining that in this learning, one is “operating” on, and is influenced by the environment.

Thorndike formulated his “*law of effect*” after his research demonstrated that “If the response in the presence of a stimulus is followed by a satisfying event, the association between the stimulus and the response is strengthened. If the response is followed by an annoying event, the association is weakened” (University of Western Australia, 1999, www.general.uwa.edu.au/u/kraepeln/bs/bs130/operant.html).

More recently, Golan (2001) describes operant conditioning as a cognitive-behavioural approach that has implicit in its framework the understanding that much of human behaviour is learned across the developmental lifespan and that learning is essential for survival. Where *classical conditioning* illustrates **Stimuli → Response** learning, operant conditioning is viewed as **Response → Stimuli** learning since it is the consequence that follows the response that influences whether the response is likely or unlikely to occur again. It is through operant conditioning that voluntary responses are learnt (Huitt & Hummel, 1997).

Table 2.1: Discriminative stimulus - operant conditioning model

Operant Conditioning Using the Combination Reinforcement Advertising		
Environment Time One	Environment Time Two	Environment Time Three
Stimulus →	Response →	Stimulus →
Ideal consequences that follow	Operant to acquire consequence	Consequences follow
Advertisement depicting popularity, fun, romance taken resulting in loss of face and loss of physical and emotional well being	Strengthen appropriate behaviour when drinking alcohol	Removing positive experiences to leave personal experiences of loss of popularity, fun, romance

Source: Huitt, W., & Hummel, J. (July 3, 1997). *Operant (instrumental) conditioning*. Retrieved 30 May, 2002, from www.chiron.valdosta.edu/whuitt/col/bethsys/operant.html

The 3-term model of operant conditioning is probably most applicable to this research study. This 3-term model of operant conditioning incorporates the concept that responses cannot happen without an environmental event (an antecedent stimulus) preceding it. While the antecedent stimulus in operant conditioning does not elicit or cause the response as it does with classical conditioning ($S \rightarrow R$), it can influence it. When an antecedent does influence the likelihood of a response occurring, it is technically called discriminative stimulus (Huitt & Hummel, 1997). In this study, the *example* in Table 2.1 demonstrates the discriminate stimulus research design used for this study.

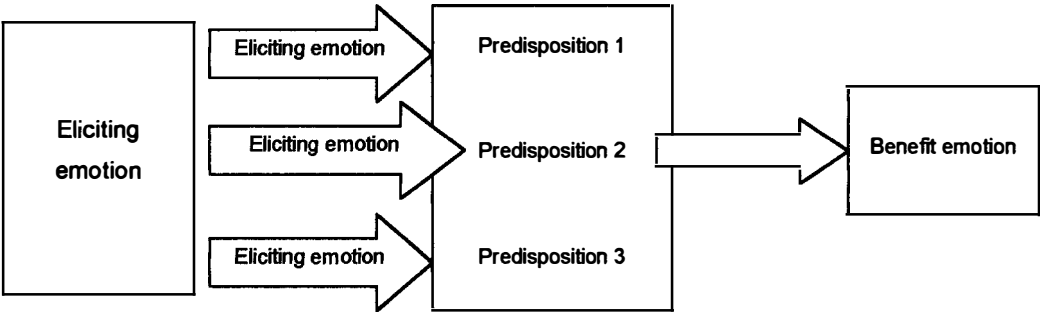


Figure 2.2: Model by Mizerski and White (1986) that demonstrates how emotion can be elicited through reinforcement advertising

Source: Mizerski, R., & White, D. (1986). Understanding and Using Emotions in Advertising. *Journal of Consumer Research*, 3(4), 57-69

Applying this theory to advertising that discourages adolescent binge drinking, model in Table 2.1 suggests the antecedent stimulus (the advertisement) would *influence* adolescent response to alcohol (encouraging restraint). The antecedent stimulus presented in this example is the attainment of popularity among peers, fun times and the possibility of romance. Thus, the design of the 3-term

model of operant conditioning is satisfied ($S \rightarrow R \rightarrow S$). Ultimately, it is the stimulus that follows the voluntary response that changes the probability of whether the response is likely or unlikely to occur again (Huitt & Hummel, 1997).

Mizerski and White (1986) explain that “where advertising is being designed with the intention of communicating the emotional benefits resulting from the purchase of the product, then a learning procedure that incorporates reinforcement of appropriate marketplace responses will be most likely to be successful” (p.63). Mizerski and White (1986) suggest that reinforcement plays a central role in the development of predispositions to respond. They state that classical conditioning for example, “is not sufficient for the formulation of behavioural dispositions” (Mizerski & White, 1986, p.64). Mizerski and White (1986) present the model in Figure 2.2 to explain how the reinforcement takes affect. This model outlines how the advertisers presents the target behavioural predisposition (predisposition 2) as the most appropriate response to produce the final “reward” or benefit emotion, “a pleasant emotional state” (Mizerski & White, 1986). In a sense, the eliciting emotion is the cue or stimulus for the target predisposition, which in turn is rewarded by the attainment of the emotion (Mizerski & White, 1986). To the extent that the emotional benefit is a successful reinforcer. In the context of anti-binge drinking advertisements, “fear might be used to motivate the consumers to engage in behaviours that reduce that fear, and thereby bring about relief” (Mizerski & White, 1986, p.64).

There are four major techniques used in operant conditioning. These techniques combine to decrease the probability that a specific behaviour will occur in future. Both positive/pleasant or negative/aversive stimuli are used and the action taken is to either add or remove the stimulus (Huitt & Hummel, 1997). Table 2.2 models the different outcomes that can be achieved through the use of operant conditioning.

Table 2.2: Operant conditioning outcomes

	<i>Increase Behaviour</i>	<i>Decrease Behaviour</i>
Positive Stimulus	Positive Reinforcement (Add Stimulus or Consequence)	Response Cost (Remove Stimulus or Consequence)
Negative Stimulus	Negative Reinforcement (Remove Stimulus or Consequence)	Punishment (Add Stimulus or Consequence)

Source: Huitt, W., & Hummel, J. (July 3, 1997). *Operant (instrumental) conditioning*. Retrieved 30 May, 2002, from www.chiron.valdosta.edu/whuitt/col/bethsys/operant.html

Within this conditioning model, methods such as *positive-reinforcement*, *negative-reinforcement*, *response cost* and *punishment* are used. Solomon (1999) explains that reactions from a person’s environment to behaviour can be either positive or negative, and that these outcomes or anticipated outcomes can be applied or removed. That is, under conditions of both positive reinforcement and punishment, the person receives a reaction after doing something. In contrast, negative reinforcement occurs when a negative outcome is avoided and as such, removal of something negative is pleasurable and hence rewarding (Solomon, 1999). Each of these methods will now be briefly explained.

Positive Reinforcement

Positive reinforcement is the process whereby rewards provided by the environment strengthen responses to stimuli and where appropriate behaviour is learned (Bergiel & Trosclair, 1985; Solomon, 1999; Chapa, 2001). Positive reinforcement always indicates a process that strengthens a behaviour (Huitt &

Hummel, 1997, p.6). Positive reinforcement brings with it pleasant consequences that may include concrete rewards such as money, toys, stickers, lollies or intangible rewards such as affection, approval or recognition (Chapa, 2001, www.hwi.com/tygger/edpsych/behavioral/operant.html). Golan (2001) explains that by using this behavioural approach, something that is valued or necessary is presented after a specific behaviour, thus the desired behaviour then increases to attain that goal. For example:

- When someone feels good because they were able to provide the correct answer to questions in a classroom (intangible reward)
- Where a commercial gives a young women encouragement and tips to help her quit smoking – an intangible reward (Tripp, 1989)
- Where an airline rewards regular passengers with free drinks, upgrades, bonus points (concrete rewards) or recognition and status (intangible rewards).

Huitt & Hummel (1997) also provide the following example of positive reinforcement:

“Every time Julie raises her hand in class the teacher calls on her. She raises her hand 3 times during the first class, 3 times in the second class, and 4 times during the last class” (p.6).

Since the consequence (being called upon) was added and the behaviour was strengthened (putting her hand up), the process is positive reinforcement.

Negative Reinforcement

Negative reinforcement strengthens responses so that appropriate behaviour is learned (Bergiel et al., 1985; Solomon, 1999; Chapa, 2001). A negative or aversive stimulus is used in the process, and second, the reinforcer is subtracted. In negative reinforcement, after the response, the negative reinforcer is removed which increases the frequency of the response (Huitt & Hummel, 1997). Negative reinforcement might include relief from pain, the ending of arguments or cries or the removal of some barrier that is keeping us from obtaining something we want. With negative reinforcement a behaviour is strengthened by removing whatever barrier is in the way or causing us difficulty (Chapa, 2001, www.hwi.com/tygger/edpsych/behavioral/operant.html).

Golan (2001) explains that by removing an unpleasant stimulus whenever a response occurs, this will in turn have the effect of strengthening that response. For example, when someone turns off an alarm clock they are rewarded with peace, or when someone puts sunburn cream on they are then able to reduce the event of pain (Golan, 2001). When looking at advertising, Solomon used the example “where an advertisement might show an adolescent staying at home because they did not adopt appropriate drinking behaviour in the past and he or she has been disassociated with the group” (1999, p.98).

Huitt and Hummel (1997) present the following example of the negative reinforcement operant:

“John does not go to the dentist every six months for a check-up. Instead, he waited until a tooth really hurts, then he goes to the dentist. After two emergency trips to the dentist, John now goes every 6 months”
(p.7).

Since the consequence was subtracted (tooth no longer hurting) and the behaviour was strengthened (going to the dentist), the process is negative reinforcement (Huitt and Hummel, 1997).

Response Cost

If positive reinforcement strengthens a behaviour by adding a positive stimulus, then response cost has to weaken a behaviour by subtracting a positive stimulus. After the response the positive reinforcer is removed and this then weakens the frequency of response (Huitt & Hummel, 1997). An example might be as follows:

“Gregory is being reinforced using a token economy. When he follows a direction or command he earns a point. At the end of each day, Gregory can “buy” for example, free time or television privileges with his points. When he misbehaves or does not follow commands, he loses points. Gregory used to call his mother names. Since he has been on the point system, his name-calling has been reduced to almost zero” (Huitt & Hummel, 1997, p.7).

Since the consequence (losing points) was subtracted and the behaviour weakened (calling names) the process is called, response cost.

Punishment Reinforcement

Punishment reinforcement occurs when a response is followed by unpleasant events (Solomon, 1999). If negative reinforcement strengthens a behaviour by subtracting a negative stimulus, the punishment has to weaken a behaviour by adding a negative stimulus. After a response a negative or aversive stimulus is added which weakens the frequency of the response (Huitt & Hummel, 1997; Gollan, 2001). When punishment has occurred, our tendency to repeat the action is then weakened. To help understand this, Thorndike's Law of Effect contains two facets of importance here, these are: 1) rewards increase the likelihood of responses which precede them and; 2) punishments decrease the likelihood of responses which precede them (University of Western Australia, 1999, www.general.uwa.edu.au/u/kraepeln/bs/bs130/operant.html). Therefore, punishment either decreases or eliminates a particular behaviour (Chapa, 2001, www.hwi.com/tygger/edpsych/behavioral/operant.html). Examples might include:

- Verbal reprimands from authority or parking tickets (University of Western Australia, 1999, www.general.uwa.edu.au/u/kraepeln/bs/bs130/operant.html)
- Time-out, where a behaviour is decreased or eliminated by temporarily removing the student from class participation (Chapa, 2001, www.hwi.com/tygger/edpsych/behavioral/operant.html)

Huitt and Hummel (1997) present the following example of punishment reinforcement:

"Billy likes to campout in the backyard. He camped out on every Friday night during the month of June. The last time he camped out, some

older kids threw a bucket of water over him while he was sleeping. Billy has not camped out for three weeks” (p.7).

Since the consequence (having water thrown over him) was added and the behaviour (camping out) was weakened, the process was punishment (Huitt & Hummel, 1997).

A critic of punishment reinforcement, Golan (2001) suggests the effect is only temporary and overly specific and the punishment does not eliminate a behaviour, rather it suppresses it. It is also associated with negative side effects including aggressiveness, negative emotions, and escape, avoidance, and fear. Nevertheless, confusion often exists between the concepts of negative reinforcement and punishment. The distinction between these concepts can be clarified when viewing Table 2.2. Both positive and negative reinforcement serve to increase the probability of an action that operates on the environment to produce a change in the environment (University of Western Australia, 1999, www.general.uwa.edu.au/u/kraepeln/bs/bs130/operant.html). Negative reinforcement strengthens a behaviour by removing whatever barrier is in the way or causing difficulties in changing that behaviour (Chapa, 2001). *Punishment* serves to decrease the probability of a behaviour by adding a negative stimulus to the environment as a consequence of a response behaviour (University of Western Australia, 1999, www.general.uwa.edu.au/u/kraepeln/bs/bs130/operant.html).

It has been demonstrated how operant conditioning works and how operant conditioning might be used in the context of advertising. With this literature review into the background theory of operant conditioning addressed these theoretical concepts can now be applied to the topic of interest in this dissertation - the behavioural modification of those adolescents who misuse alcohol. Focusing in on this topic the most recent Commonwealth Government advertising campaign titled '*Choices, Where are Yours Taking You?*' is the most interesting and relevant case in

point to discuss. This campaign shows scenarios where actors in the advertising portrayal use restraint in refusing an offer of alcohol (or more alcohol). This behaviour was adopted by the actors in order that they might benefit from the decision to make the more appropriate choice of behaviours where alcohol is concerned. In these advertising portrayal these actors role play in a manner that ultimately does appear credible, where they appear competent and comfortable within themselves and thus, socially desirable. The resulting ($S \rightarrow R \rightarrow S$) positive reinforcement effect resulted:

1. The advertisement demonstrated vicariously the $S \rightarrow R$ relationship
2. The response was strengthened (the response - restrained drinking)
3. Attainment of the stimuli or consequence occurred (the consequence being popular, being credible, having fun)

This advertisement did however have another facet that made it quite unique. While this portrayal was unfolding, the audience also viewed a parallel and simultaneous portrayal of the same actor who in this instance chooses not to use restraint when offered alcohol. The result was one where the actor suffered terrible humiliation and a loss of emotional and physical wellbeing. This portrayal when viewed in isolation resulted in its own ($S \rightarrow R \rightarrow S$) punishment operant that went as follows:

1. The advertisement demonstrated vicariously the $S \rightarrow R$ relationship
2. The response was weakened (the response - unrestrained drinking)

3. Attainment of the stimuli or consequence was added (the consequence being humiliated, injured)

This advertisement was in reality, a *dual positive reinforcement / punishment execution style* advertisement. Importantly, when combined as intended the advertisement would be processed differently, taking on more of a *negative execution style*. The advertisement would be processed in the following ($S \rightarrow R \rightarrow S$) operant:

1. The advertisement demonstrated vicariously the $S \rightarrow R$ relationship
2. The response was strengthened (the response - restrained drinking)
3. Attainment of the stimuli or consequence was subtracted (the consequence being popular, being credible, having fun)

It might therefore be argued that the design of this advertisement had as its affect a negative reinforcement operant. With this in mind it might be argued that by taking this approach, the health authorities hope to demonstrate to the audience those positive outcomes as opposed to just those negative outcomes that arise through the appropriate use of alcohol. The strength of this advertisement is that not only does it show a positive outcome for the actor but it also demonstrates a self-efficacy message where the desired 'adaptive coping behaviour' occurs and the reward is forthcoming. Recalling earlier discussions in this literature review, the inclusion of the self-efficacy message within a communication can greatly increase the likelihood that the desired behaviour or adaptive behaviour occur (Tanner et al., 1991; Witte & Allen, 2000).

2.7 Marketing of Alcohol and Adolescents: Advertising Practices and Suggested Effects

Pro-alcohol advertising will be discussed here for two reasons. Firstly, there is only a limited amount of research into the effects of advertising that addresses adolescent binge drinking but conversely, there is quite a large amount in the area of pro-alcohol marketing that might serve as a resource of inference. Secondly, pro-alcohol advertising appeals appear to frequently use associative techniques in their advertising where those classical conditioning techniques discussed earlier are in use (Wyllie et al., p.362). To do this adolescents are shown images of people in settings where there is glamour, fantasy, romance, masculinity and where people are seen to be popular (Saffer, 2002; Wyllie et al. 1998). In addition to these beliefs on advertising Grube (1993) identifies the general portrayal of alcohol use in regular programming as another source of communication on alcohol where again, it is likely to be associated with appealing people who are successful and who move in idealistic social and physical environments.

Wyllie, et al. suggest that most learning, particularly for the 10-17 year old age group, takes place via modelling and pro-alcohol advertising generally uses association between drinking and being accepted by peers. A number of authors have suggested that pro-alcohol advertising appeals targeting adolescents are quite often also designed in a way that leaves adolescent audiences with the more overt impression that drinking can be associated or even rewarded with positive outcomes (Grube & Wallack, 1994; Saffer, 2002; Wyllie et al. 1998).

Consumers' reactions to a product, over and above their feelings about the product itself, are influenced by their evaluations of its advertising. Solomon suggested consumers' attitude to an advertisement (A_{ad}), can affect the feelings of consumers to the degree that advertisements can directly affect attitudes to the brand

itself (Solomon, 1999). Solomon suggests that our evaluation of a product can be determined “solely by our appraisal of how it is depicted in marketing communications – that is, we do not hesitate to form attitudes toward products we have never seen in person, much less used” (1999, p.212).

Because of this, concern exists as to the negative effects that may occur with adolescents who are continually exposed to positive portrayals of alcohol that are often used both in advertising and in the programming itself. Perhaps demonstrating this, Atkin (1993) has suggested there are three commonly used mainstream advertised beliefs that are often used to positively reinforce drinkers by the legitimisation and rationalization of alcohol consumption. These include the propagation of the belief that: 1) Drinking is a widespread norm; 2) Alcohol is a harmless substance, and; 3) Deficit motivations such as escape and relief are accepted reasons for drinking. Similarly, the omission of depictions of negative drinking consequences may lead to the inference that alcohol consumption is safe and non-problematic (Atkin, 1993).

According to Atkin (1993), the persisting impact of alcohol advertising gradually accumulates over dozens or hundreds of exposures. These accumulated exposures develop and reinforce favourable attitudes toward alcohol and drinking practices. “Through persuasion processes of conditioning, social learning, operant learning, and reasoned action, these cognitive changes are translated into pro-drinking attitudes and intentions” (Atkin, 1990, p.11). Perhaps demonstrating this, Grube (1994) found that where adolescents indicated they had a liking for alcohol advertisers’ advertisements, they also showed a higher expectation to drink alcohol. It is for this reason it has been suggested that alcoholic drink advertising might reasonably be expected to:

- 1) Encourage non-drinkers to drink
- 2) Discourage drinkers from giving up
- 3) Encourage drinkers to increase consumption
- 4) Discourage drinkers from cutting back consumption

- 5) Encourage drinkers to change or maintain drink preferences
- 6) Encourage drinkers to change or maintain brand preferences

(Aitken, Eadie, Leathar, McNeill & Scott, 1988)

Alcohol advertisers use many sophisticated and expensive promotional campaigns to gather favour with their audiences. Many of these have been found to be appealing to adolescents. As an ongoing response to the demands of special interest and community groups and policy makers, studies have continued to try and assess the likely effect of alcohol promotions on adolescents. In spite of the work that has been done in this area, the U.S. National Institute of Alcohol and Alcoholism have concluded not without controversy, that results to-date on alcohol advertising are mixed or inconclusive (National Institute of Alcohol Abuse & Alcoholism, 1998; Zinser et al., 1999). This lack of success should however, not be surprising suggests Zinser (1999) and Wyllie, et al. Zinser points out that “the effects of advertisements and other media portrayals are presumably cumulative, over many thousands of exposures” (p.426). Zinser goes on to say “the incremental impact of exposure to a few ads on behaviour or even on attitudes is unlikely to be great” (1999, p.426).

These findings aside, a number of researchers have still found what they believe to be strong evidence to suggest that where children and adolescents are concerned, alcohol advertising does create a number of negative outcomes (Atkin, 1987/90/93; Adlaf & Kohn, 1989; Connolly, 1994; Grube & Wallack, 1994; Casswell, 1995a; Grube, 1994; Slater, Rouner, Beauvais, & Murphy, 1996a; Aitken, 1988; Wyllie et al. 1998). Zinser (1999) suggests that the best way to determine whether advertising is having an effect is to examine the effects of the advertising stimuli on antecedents of behaviour and attitudes rather than trying to measure the cumulative effect of an advertising campaign. With this in mind, the ensuing discussion covers a number of observations and research findings that have been made by various researchers with regards alcohol advertising and adolescents.

One reason why alcohol advertising might be considered so attractive to adolescents might be attributable to the practical implications of the human condition known as adolescent egocentrism, which was a concept touched upon in an earlier part of this dissertation in the context of *imaginary self* and the *personal fable* (Eklind, 1967, p.1028). For example, some researchers have suggested that advertisers create imagery that is quite persuasive to the adolescent's imagination and this approach can therefore be quite evocative to this audience (Grube & Wallack, 1994; Grube, 1993; Kelly & Edwards, 1998). This is said to be "because it incorporates such things as celebrity endorsers, humour, animation, and rock music that are especially appealing to the adolescents as it represents a fantasy image to them" (Grube, 1993, p.65). Researchers such as Strickland, Finn and Lambert, (1982) and Atkin, Neuendorf and McDermott (1983) believed that alcohol advertising positively associates drinking with personal attributes, such as sociability, elegance, and physical attractiveness, as well as with desirable outcomes such as success, relaxation, romance, and adventure. More recent research by authors such as Smart (1988), Wyllie, Caswell and Stewart (1991), Wyllie, et al. (1997), Kelly and Edwards (1998), Slater et al. (1996) and Williams and Perry (1998) seemed support these earlier findings suggesting a general consensus that the imagery of alcohol advertising was likely to be very persuasive on young people.

Other findings on the advertising of alcohol found evidence to suggest that the advertising of alcohol was very evocative and was enjoyed by adolescents probably more so than many other product category advertisements (Aitken, 1988; Kelly & Edwards, 1998; Wyllie et al., 1998, Zinser et al., 1999). For example, research by Kelly and Edwards (1998) found evidence to suggest that adolescents who drink or intend to drink alcohol in the future found alcohol advertisements more appealing than any other product advertisements that they tested (p.55). Zinser et al. (1999) also found evidence to suggest rating and recall scores for alcohol advertisements were significantly higher than those for cigarette advertisements and among the highest of all product groups tested. Those groups tested included

cigarettes, alcohol, cars, deodorant, jeans, soft drink, athletic shoes, breakfast cereal, and fast food.

The images in alcohol advertisements have been found to be particularly appealing to younger audiences in a number of studies (Strickland, 1982; Atkin, 1987; Casswell, 1995a; Grube & Wallack, 1994; Slater et al., 1996a; Perry, 1998; Oddy & Hawks, 1997; Wylie et al., 1997; National Expert Authority Committee on Alcohol, 2000). For example, evidence suggests there is a relationship between liking an alcohol advertisement and a greater anticipation to drink (Grube, 1994) and that alcohol advertising “creates an anticipation among the young to grow, to be old enough to drink [alcohol] and gain the drinking fantasy lifestyle” (Wyllie et al., p.367). Further to this, Atkin, Hocking and Block (1984) reported that their research indicated that “among those adolescents who had not yet begun drinking [alcohol], those with heavy exposure to alcohol advertising were more likely than their counterparts with a more limited exposure to indicate that they plan to drink in the future” (p.161).

A number of studies concluded alcohol advertising affects the quantity of alcohol consumed (Atkin 1987; Adlaf & Kohn, 1989; Grube & Wallack, 1994; Connolly et al., 1994; Casswell, 1995b; Wyllie et al.). Atkin et al. (1984) for example, found evidence to suggest a significant association exists between exposure to alcohol advertising and self-reported consumption of alcohol by adolescents. Further anecdotal evidence as to the effects of alcohol advertising on adolescent alcohol consumption might be found in the research of Casswell. Research by Casswell (1995) found evidence to suggest that the level of exposure to alcohol advertising contributes to higher alcohol consumption which in-turn increases social and health problems. Other evidence suggested “alcohol advertising reinforces alcohol consumption in existing adolescent drinkers” (Aitken, 1988, p.1399).

Of concern to health promotion authorities, the voice of pro-alcohol promotion has been found to enjoy far higher exposure and frequency levels than any

anti-consumption health promotion communications and this imbalance in the advertising is said to be worsened by an overwhelming presence of alcohol placements in general media and mainstream programming (Fedler, Phillips, Raker, Schefsky & Soluri, 1994; Oddy & Hawks, 1997; Parsons, Rissel & Douglas, 1999). Many of the early studies also found significant, positive relationships between exposure to, or awareness of, alcohol advertising and drinking beliefs and behaviours among young people (Atkin & Block, 1980; Atkin et al., 1983; Atkin et al., 1984; Aitken et al., 1988; Adlaf et al., 1989).

It has been hypothesized that a substantial volume of negative news stories and editorials on alcohol could in themselves have a countervailing effect on the image promotion of alcohol products and drinking, but this does not appear to be the case suggests Oddy & Hawks (1997, p.167). Western Australian research by Oddy and Hawks (1997) concluded that “the negative effects of alcohol, delineated in news stories and editorials, were effectively overshadowed by a plethora of positive alcohol advertising” (p.166). It is not only the volume of alcohol advertising that is overwhelming but the advertising is often driven by big budget, appealing, image orientated advertising that resonates with younger audiences (Casswell, 1995a; Perry, 1998; Oddy & Hawks, 1997; National Expert Authority Committee on Alcohol, 2000).

Alcohol is also portrayed favourably within prime-time television programming in Australia. Research by Parsons, et al. (1999) found that while there has been a significant threefold decrease in the amount of references to alcohol in prime time television between 1990 and 1997, there has been no significant difference in the amount of times actors consumed alcohol on television. Parsons, et al. made the observation that “an uncritical observer of Australian soap operas, popular with adolescents, might reasonably conclude that alcohol is everywhere, is there to be drunk, is used and accepted by all ages and both sexes (though males mostly) and is rarely associated with any negative consequences (p.70).” Atkin (1993) does however comment that, “whether teens see 100 or 200 drinking acts per

week may not make much difference, but the ratio of positive versus negative depictions can significantly determine attitudinal and behavioural outcomes” (p.540).

The context in which alcohol is presented can also be important. Atkin (1993) for example, suggests that “portrayals may be more balanced if they play down the popular portrayal of alcohol as a coping agent and instead more realistically represent alcohol as being a problem maker rather than a problem solver” (p.540). Atkin’s (1993) point is that by showing alcohol in portrayals such as this adolescents might then choose to model themselves on this contrasting consumption behaviour where more restraint is used.

Alcohol advertising policy is a hotly contested social issue in many countries (Casswell, 1995b) including Australia. While researchers have found evidence to suggest alcohol advertising is a negative influence in the community, particularly with children and adolescents, the results are still considered in some circles to be lacking rigour and consistency (National Institute of Alcohol Abuse & Alcoholism, 2000). Researchers such as Casswell (1995) are however adamant that alcohol advertising is harmful, particularly to younger people. In recent years U.S. public health advocates have called for stricter regulation on alcohol advertising or for the elimination of alcohol advertising altogether (Mosher, 1994). Closer to home, the New Zealand Government has in the past put in place regulation restricting alcohol advertising on television to late at night during weekdays (Casswell, 1995b) however this law has been rescinded in recent times (Saffer, 2000). Bans on all alcohol advertising have also been seen in places such as Denmark, Finland, Canada, France, Norway and Sweden while many other countries have partial bans that only extend to alcoholic spirits (Blaum & Fong, 2001). Due however to the inconclusive research results into the effectiveness of alcohol bans, coupled with ongoing pressure from the alcohol beverage industry, more recently Denmark, Finland and Canada have rescinded these laws (Saffer, 2000; Blaum & Fong, 2001).

Casswell (1995b) suggests that, similar to tobacco advertising, that research findings in respect to alcohol advertising have often been referred to as inconsistent and have certainly not met the standard of proof that the vested interest groups, advertising media and alcohol industries believe is necessary, before restrictions are placed on alcohol advertising on public health grounds. The engaging images and messages in alcohol commercials and sponsorship may add to the perception among critics that the advertisements contribute to increased drinking and drinking problems (National Institute of Alcohol Abuse & Alcoholism, 1998). Another method of alcohol advertising that has been considered especially appealing to adolescent men is alcohol's involvement in sport (Slater et al., 1996a, 1997; Wyllie et al.). In Australia, tobacco sponsorship in sport is banned with the exception of the Australian Formula One Grand Prix. There is no such ban on alcohol advertising in Australian sport for example, the Foster's Australian 500cc Grand Prix, is strongly financed by sponsor Fosters. Drinking alcohol while watching sport, or after participating in sport is considered to be standard cultural practice by many Australians.

A number of researchers Atkin, (1994), Saffer, (1991), Wyllie, et al., Oddy and Hawks (1997) maintain that bans on alcohol advertising should be considered as an option to try and address this adolescent binge-drinking problem. In support of this argument, Oddy and Hawk (1997) cite the success in Western Australia of the bans on advertising tobacco products that have been proven to have had a positive effect on the overall reduction in the consumption of tobacco. Opinions are however still mixed as to the benefits if any that would accrue from advertising bans. After conducting a comprehensive literature review, Atkin (1987) concluded that there is a case for the banning of alcohol advertising in all media. Others such as Adlaf, et al. (1989) suggest however, the positive benefits of further restricting alcohol advertising or banning alcohol advertising would be modest. Prominent researcher in the area of alcohol advertising bans Henry Saffer concluded from his study that "alcohol advertising bans decrease alcohol consumption by a minimum of five to eight percent" (2000, p.1). Other researchers were unable to find any evidence to

suggest a ban on alcohol advertising would be effective in reducing consumption (Smart & Cutler, 1976; Ogborne & Smart, 1980; Makowsky & Whithead, 1991; Smart, 1988). Further to this, Adalf, et al. suggested that the banning of alcohol advertising could indeed have a negative societal effect rather than a positive effect by restricting freedom of commerce, by creating a public loss of information relevant to brand choice, and by creating a loss of advertising revenue and reduced employment in industries such as advertising.

In Australia, a system of self-regulation of alcohol advertising has existed since 1997. The system is managed by the Advertising Standards Bureau and allows specific industries with their own codes of advertising to be managed by the industry group. Hence, the “Alcohol Beverages Advertising Code” was established in 1998 by four major alcohol beverages industry associations, who fund, manage and operate the code (National Expert Authority Committee on Alcohol, 2000). This ‘industry group’ arrangement has been criticised in the past as having an inappropriate relationship with industry participants. It has therefore, been suggested that it makes it difficult to feel confident that this body will make all decisions with the public interest at heart (Aitken, 1988; Casswell, 1995b; Ford, 1996; Perry, 1998).

The preceding discussion in section 2.7 covered pro-alcohol advertising explaining some of the methods that have been used in the past to get across positive messages about alcohol and it’s use. This section also looked into how advertisers attempt to associate alcohol with positive imagery and outcomes in order that they might get their message across. It was found that some controversy exists as to the true level of persuasiveness of pro-alcohol advertising however, the balance of opinion seems to lay in favour of the belief in the effectiveness of advertising methods being used to date. The discussion that took place highlighted the high probability that these emotional and image based advertising campaigns are very likely to have a considerable impact on adolescent consumers. This is due in no small part to the use of techniques such as classical conditioning and the subsequent associative processing that occurs. The belief in some quarters as to the negative

impact of alcohol advertising might have on adolescent alcohol usage has steered this discussion into a brief review of the argument in support of alcohol advertising prohibition.

2.8 Summary

This literature review has covered a number of areas thought to be relevant to the topic of health promotion advertising targeted at reducing adolescent binge drinking. The areas that have been covered in this chapter include; alcohol in Australian society; adolescent binge drinking; adolescent psychology and alcohol; past and present health promotion approaches, threat based communications, operant conditioning and alcohol promotion advertising. Information specific to advertising to adolescents about alcohol restraint has been found to be very limited. However, this literature review did uncover some important areas of interest to this topic. In particular, those areas thought to be most important to the upcoming research include the following:

- Adolescent psychology
- Adolescent attitudes toward advertising and their possible reactions to advertising
- Behavioural learning theories such as classical conditioning and operant conditioning
- Threat based advertising that evokes fear avoidance motivation

In conclusion, this section has identified that while pro-alcohol messages using methods such as classical conditioning seem to be reasonably well researched and frequently discussed, very little research seems to have occurred into the methods used by social marketers to alter inappropriate alcohol usage. In particular,

recent initiatives by State and Commonwealth governments appear to have adopted displays of operant conditioning as an appropriate method of influencing future drinking behaviours of adolescents, but there seems to be no real research available to suggest how effective this method might be. Perhaps even of more interest is the question asking “*how are adolescents more likely to respond to each of the operant conditioning approaches?*” For example, the positive, negative or punishment type operant conditioning advertising approaches

In the next chapter of this dissertation, chapter 3, a framework for the upcoming research study will be presented. The chapter to follow, chapter 4, will then go through the exact methodology used to conduct the study. Chapter 5 will then present the findings of the study.

Chapter Three - Theoretical Framework

3.0 Introduction

The purpose of this chapter is to synthesise the content that was discussed in chapters one and two of this dissertation and by doing so will put the information into an order that is meaningful within the context of the upcoming study. Additional information will be discussed within the area of attitudes and attitudes toward advertising and then this discussion will be presented in light of the topic of anti-binge drinking advertising. With this in mind the areas that are thought to be most worthy of further elaboration and appropriate for the development of a theoretical framework for this study are as follows:

- Attitudes toward the advertising, attitude toward the cause and attitudes toward the behaviour
- Operant conditioning using positive and negative advertising reinforcement as well as a type of operant conditioning that uses a *combination* of the positive and punishment reinforcement
- Threat based advertising as a theory in marketing that might best explain target audience reaction to the three operant conditioning approaches

In the following section, the areas of '*attitudes to advertising*,' '*attitudes to the brand*,' and '*attitudes toward the act*' will be discussed. It is important to note at this point that the language and examples used may be non-health promotion specific. Because of this, some of the discussion that takes place will be in the area of advertising that promotes messages for packaged goods rather than “de-

marketing” of behaviours that harm health. Given this, some of the terminology that is commonplace to this area will now be explained:

- ***Attitude to the advertisement*** will be defined as a predisposition to respond in a favourable or unfavourable manner to a particular advertising stimulus during a particular exposure occasion (Lutz, 1985).
- ***Attitude to the brand or object*** will be used interchangeably for the purpose of this study as *the attitude to the cause of prevention of binge drinking in adolescents*
- ***Attitude toward the intention to act*** will refer to the adolescents’ self-reported intention to act in a prescribed way, in this , exercise restraint or abstinence

During the discussion on this topic a widely accepted model of advertising affect will be presented for the reason of its explanatory power in demonstrating the linkages between appropriate design in advertising communication and advertising effectiveness. While it is not intended that the relationship in this table be specifically tested in this study, the model will however be re-presented in the context of this intended study so as to best clarify *the way* health communications still fit into this general marketing theory.

Section 3.2 will revisit the operant learning schema and classify the advertising stimuli for this study. These operant advertising stimuli will then be put into context in Section 3.3, explaining the likely impact threat-based advertising executions might have on influencing operant conditioning approaches. The hypotheses will then be presented at the end of Section 3.3.

3.1 The Importance of Liking the Advertisement

“Consumers’ reactions to a product are influenced by their evaluation of its advertising over and above their feelings about the product itself” (Solomon, 1999, p.211). Feelings can be defined as “temporary affective states that are subjectively perceived by an individual” (Murry, Lastovicka & Singh, 1992, p.441). Consumers experience different feelings when they watch advertisements and these feelings can ultimately affect the effectiveness of the advertisement (Edell & Burke, 1987; Murry et al., 1992). Research has suggested that feelings contribute uniquely to attitude toward the advertisement, beliefs about the brand’s attributes, and attitudes toward the brand (Edell & Burke, 1987; Mueling & Lacznaik, 1988). Katz (1960) suggested that people form attitudes in response to a need to structure their rather chaotic universe. Solomon believes that our evaluation of a product can be determined solely by our appraisal of how it’s depicted in marketing communications suggesting “we don’t hesitate to form attitudes toward products we’ve never even seen in person, much less used” (1999, p.211). Factors thought to be determinants of attitude to the advertisement include among other things, consumers’:

- Level of involvement in the communication (Mueling & Lacznaik, 1988)
- Likely weighting of the future importance and utility of the communication to the individual (Fazio, Lenn & Effrein, 1984)
- Evaluations of the advertising execution itself in terms of credibility, accuracy and importance (MacKenzie et al., 1986)
- Mood or feelings evoked by the advertisement (Mizerski & White, 1986; Edell, 1987; Solomon, 1999)
- Evaluations of both the visual and verbal content of the advertisement (Petty & Cacioppo, 1981; Mitchell, 1986a/b)

- Amount of exposure to television advertising (Moschis & Moore, 1982)
- Individual's level of scepticism towards the advertisement (Boush et al.)
- Viewing of 'other content' that is seen in the advertisement or surrounding the advertisement (Murry et al., 1992).

Evidence has also suggested adolescents evaluate advertising differently according to their age, gender or social class (Moschis & Churchill, 1979). Moschis and Churchill (1979) found evidence to suggest girls were more likely to feel positively about advertising, as were younger lower class adolescents. This trend in lower class adolescents was however found to reverse itself as the individual matures. This study also concluded attitudes toward advertising do tend to 'cool off' as the adolescent matures and becomes a more competent consumer (Moschis & Churchill, 1979).

Other research has indicated that one's attitude toward the advertisement is an important mediator in the actual formation of brand attitudes *or attitudes to the object* (Machleit & Wilson, 1988; Mueling et al., 1988). Anything toward which one has an attitude is called an attitude object (Solomon, 1999). Advertisers are said to generate an array of "feelings" or "moods," and associated experiences with the brand or product class (Ray & Batra, 1988). The use of emotional themes, symbols, or other materials in advertising can "clearly can be effective in developing and perpetuating positive reactions to a product" (Mizersk & White, 1986, p.59). Research has also identified that not only does a positive attitude toward the advertisement mediate evaluations of brand attitudes [or object] it also is an antecedent mediating purchase intentions (MacKenzie & Lutz, 1989). MacKenzie, Belch and Lutz (1986) found attitude to the advertisement and attitudes to the brand are linked and are antecedents to the intention to act or behave in the prescribed way. It is for this reason one starts to understand why it is so important for advertisers to use tactics that win favour with audiences. For example, emphasis can be made for

the potential importance of an advertisement’s entertainment value to evoke feelings and moods that might then mediate the purchase process (Murry et al., 1992).

Further evidence in support of the value of producing likeable and evocative communications is presented by Beil (1990). Reviewing the results of the Advertising Research Foundation (ARF) *Copy Validation Study*, Biel concluded that the likeability of an advertisement was the single best predictor of a product’s sales effectiveness. Probably because of this broadly accepted knowledge, the ARF study returned evidence to suggest that “ratings of likeability” of advertising materials are regularly obtained by practitioners and researchers. This is done for example by using copy testing, reflecting the popular acceptance of the notion that A_{ad} mediates advertising effectiveness (MacKenzie et al.).

In reviewing this ARF study, Beil (1990) found that these results indicated that simple *advertising likeability* on its own was capable of predicting sales winners. Furthermore, advertising likeability was found to be a better predictor of sales success than any other measures such as day-after recall, persuasion and recall of copy ideas. In summary, the relationship between sales and advertising is dependent in no small part, on people’s liking of that advertisement (see Figure 3.1).

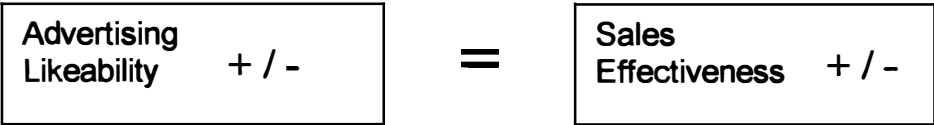


Figure 3.1: Research has suggested that A_{ad} can lead to not only an improved attitude to the brand / object but also an improved likelihood of sales

Probably the best model for explaining the causal mediating role of A_{ad} is the *Dual Mediation Hypothesis* (DMH) model that is presented by MacKenzie et al. The DMH model specifies two roles for the A_{ad} construct: a direct effect on *attitude to the brand* (A_b) and an indirect effect on A_b through *cognitions about the brand* (C_b) (see the DMH Model – Figure 3.2). This model originates from the earlier work by Shimp (1981) who conceptualised attitude to the advertisement as consisting of a *cognitive* and *affective* dimension with the various antecedents having different effects on these two dimensions. Following on from this research, Lutz (1985) proposed that a *dual-mode persuasion* process (identified structurally in the DMH model) would be found under the conditions approximated by a typical advertising pre-test situation, where participants are likely to be processing the advertisement's content and its execution with reasonable vigilance.

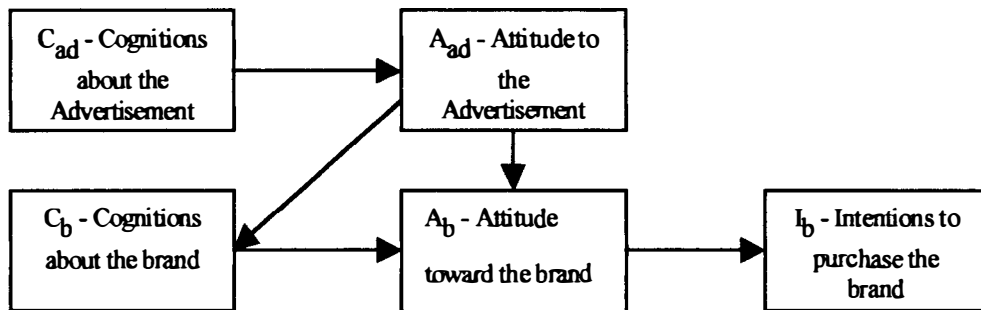


Figure 3.2: The Dual Mediation Hypothesis model (MacKenzie, Lutz & Belch, 1986, p. 131)

As the model above suggests, the DMH model has *cognition* proceeding *affect*, which in turn preceded *conative* actions (or purchase intentions). For example, advertisement related cognitions (C_{ad}) are seen as determining A_{ad} , and brand related cognitions (C_b) stimulated by advertising exposure are posited as causal antecedents of brand attitude (A_b). The DMH model also posits a direct causal relationship from A_b to brand purchase intentions (I_b) (MacKenzie et al.). This model suggests that these cognitions and affective states occur prior to purchase

intentions being cemented and with this in mind, this framework is likely to have utility in this proposed study.

The discussion in this chapter has identified the importance of: 1) the attitude toward the advertisement, 2) the attitude toward the brand or object, and 3) how these antecedent factors can be mediating forces on an individual’s intentions to act in a prescribed way. Figure 3.3 to follow is now presented with the inclusion of each of the variable of interest specific to this study. This model now puts into focus the constructs that must be evaluated if any advertisement is to be assessed for likely effectiveness. It is not the intention of this study to measure the mediating linkages between each of these components. Rather, the point of displaying this table is to identify these mediating factors and to identify the relationship these factors are believed to have with one another.

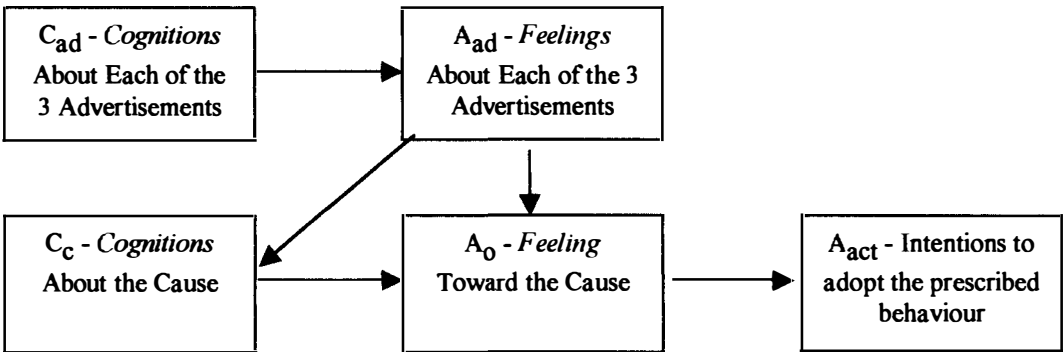


Figure 3.3: The “modified” Dual Mediation Hypothesis model as it might look in the context of this adolescent anti-binge drinking advertising study

This study will provide a straight forward evaluation of the ratings of the three different execution styles when measured on those three areas that are accepted as being legitimate constructs of advertising effectiveness, these are: 1) *Attitude to the advertisement*; 2) *Attitude toward the cause of reducing binge-drinking in*

adolescents; 3) *Attitude toward the intention to restrain drinking behaviour*. Those constructs are presented diagrammatically in Figure 3.4 along with the hypotheses of this study. The questionnaires therefore are designed in such a way as to capture this data for each of the three constructs deemed to be appropriate measures of advertising effectiveness (see the questionnaires, Appendix 5 and 6 in the appendices).

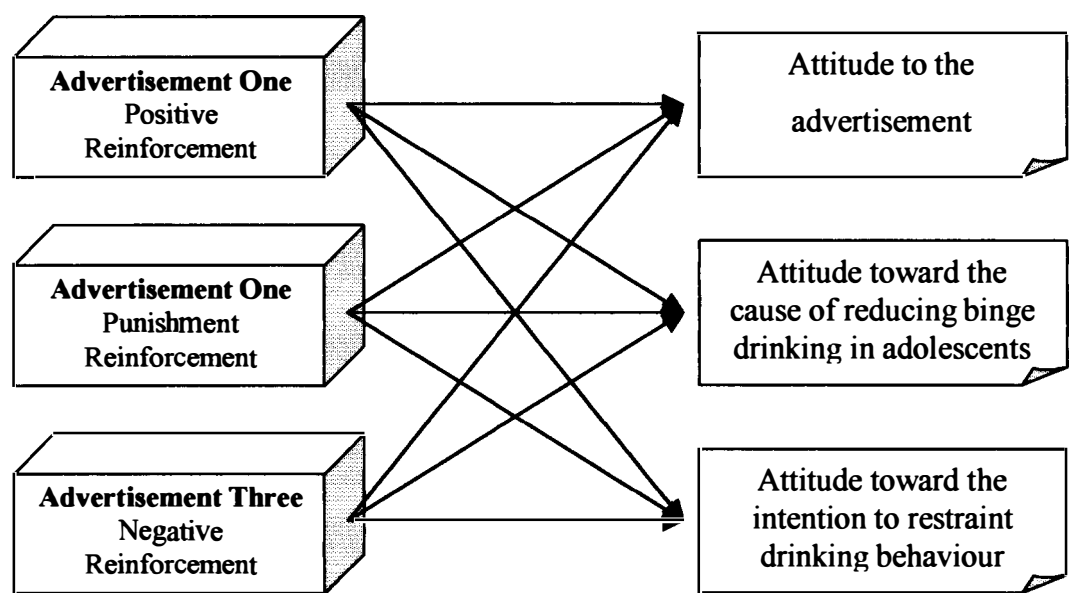


Figure 3.4: *The diagram above identifies the three constructs that are to be measured in this study by each of the three advertising execution styles*

3.2 Operant Learning and Advertising to Adolescents

Previous research has recognised that operant conditioning has regularly been used to shape consumer behaviour (Solomon, 2002). Theory suggests that an individual can learn through operant conditioning where the individual undertakes some form of action and in response to this action he or she receives a reward, a punishment, or avoids some form of negative reinforcement. Here the behaviour

precedes the reward and the action is premeditated to maximise reward and to minimise loss or pain. In the previous discussion, it was suggested that in the context of an advertising experiment such as this, the advertising changes the traditional (**R → S**) relationship between action and consequences. This belief was based on the fact that in theory, an advertising portrayal is presented (constituting a vicarious consumption experience) prior to the traditional *behaviour* and *consequence* cycle occurring. In the situation of adolescent binge drinking, the portrayal is exhibited and then the audience vicariously experiences the subsequent pleasure or pain in the advertising portrayal.

Table 3.1: *Discriminative stimulus - operant conditioning model (Based on the model by Huitt & Hummel, 1977, p.1)*

Operant Conditioning Using the Combination Reinforcement Advertising		
Environment Time One	Environment Time Two	Environment Time Three
Stimulus →	Response →	Stimulus →
Ideal consequences that follow	Operant to acquire consequence	Ideal consequences will in future be attained
Advertisement depicting popularity, fun, romance that is lost due to poor decisions versus good decisions - resulting in loss of face and loss of physical and emotional well being	Future positive behaviour around alcohol strengthened – Adoption of appropriate future behaviour when drinking alcohol	Positive experiences achieved instead of personal experiences that might include loss of face and loss of physical and emotional well being

The technique used in this advertising portrayal constitutes an event that might ideally facilitate the internalisation of depicted events in the advertising stimulus that ultimately might shape future attitudes or intended behaviours for any

upcoming consumption event. In addition to this, the adolescent’s direct prior personal experiences in life with alcohol, before seeing the advertising portrayal, is likely to further add to the perceived importance and sincerity of the message to adolescents. This type of operant learning was discussed in chapter two and was called *discriminative stimulus* operant conditioning where the relationship takes the following form of $R \rightarrow S \rightarrow R$ dynamic (see Table 3.1).

Table 3.2: Classification of the stimuli according to the operant conditioning schema

	Increase Behaviour	Decrease Behaviour
Positive Stimulus	Positive Reinforcement (Add Stimulus or Consequence) Stimuli – Girl / Boy uses restraint with alcohol – Result: Popularity, fun, romance	Response Cost (Remove Stimulus or Consequence)
Negative Stimulus	Negative Reinforcement or Combination Approach (Remove Stimulus or Consequence) Stimuli – Girl / Boy does not use restraint with alcohol – Result: Loss of physical and emotional wellbeing and simultaneously; girl / boy uses restraint with alcohol – Result: Return of popularity, fun, romance	Punishment (Add Stimulus or Consequence) Stimuli – Girl / Boy does not use restraint with alcohol – Result: Loss of physical and emotional wellbeing

Note: The negative reinforcement approach will in this study be referred to as *the combination approach* so as to avoid the otherwise, high probability of confusion regarding these terms.

Prior discussions suggested operant learning can occur through the use of advertising communications and a number of examples of operant learning in advertising were briefly presented. This earlier discussion subsequently assisted in

classifying the types of advertising portrayals that are subsequently being presented for study in this dissertation. The three classifications of operant learning communication approaches that have been identified for this study include the *positive reinforcement*, *punishment reinforcement* and *negative reinforcement approaches*. Table 3.2, represents the matrix that can be used to assist in classification of these advertising operants. For the purposes of this study, the negative reinforcement approach shall be called the “combination” reinforcement approach.

Using the *Choices, Where Are Yours Taking You* advertising campaign, three types of operants have been identified that all have some level of support as methods of shaping behavioural outcomes (Bergiel, 1985; Huitt & Hummel, 1997; Solomon, 1999, Chapa, 2001; Gollan, 2001). These three approaches have been used at different times in health promotions for the purpose of promoting various health and other causes yet there seems to be little information as to the best approach to take when advertising to adolescents about binge drinking. The discussion that has taken place in this dissertation to date therefore channels and directs focus into this area of interest. The question that seems to emerge is, “what is the most effective operant for communicating to adolescents about binge drinking?”

Because there is a lack of information available in the areas discussed it has been proposed that these areas be investigated more thoroughly to try and determine how persuasive each of the operant conditioning approaches might be in influencing attitudes toward the advertisement; attitudes toward the act [of restraint or abstinence]; the incidence of adolescent binge-drinking. The operants of interest therefore will be as follows:

1. The *positive reinforcement* (*positive execution style*)
2. The *punishment conditioning* (*punishment execution style*)
3. The *negative reinforcement* (*negative execution style*)

In Section 3.3, threat based advertising will be discussed because it is an area that needs revisiting in light of the likely results that might come about from this study. Once this is done, the formulation of the hypotheses can occur in such a way that these hypotheses will not only be addressed accurately but also in a way that might give insight into the possible results of this study.

3.3 Threat Based Advertising and this Study

It was hypothesised that this study will reveal that the *combination* advertising portrayal will be somewhat more effective than either the *punishment* reinforcement or *positive* reinforcement advertising portrayals. This belief in the likely effectiveness of the combination advertising portrayal was a result of the discussions that occurred in chapter two of this dissertation. These discussions identified the following information:

- 1) Anecdotal evidence on the effectiveness of the combination advertising portrayal over other advertising portrayals might be found through looking at the recent popularity of this approach with Commonwealth health promotion authorities in Australia. Their most recent campaign “*Choices, Where Are Yours Taking You*” is a development on earlier “*Respect Yourself*” punishment reinforcement campaigns.
- 2) Perhaps of more importance, considerable evidence has been presented on the subject of threat-based advertising that indicated this type of advertising was likely to be very effective under certain circumstances. The most recent and thorough study into threat-based advertising by Witte, et al. (1998) as well as Latour and Rotfeld (1997) concluded as others had before them, (most

importantly Roger's (1983) *protection motivation theory*) that threat based advertising is highly influential if the fear is coupled with the following elements:

- Increased references to the severity of the proposed threat (severity meaning - the magnitude of the threat)
- Increased references to the target populations' susceptibility to the threat
- Messages that have strong appeals that seem serious and likely to happen will be most motivating, whereas weak appeals will fail to facilitate behavioural change
- Strong fear appeals will need to be accompanied by equally strong efficacy messages
- The viewer must be left with the belief that they have the power to avoid the threat
- The viewer must be given the knowledge, method or help that they feel they need to effect change.

Putting this knowledge into the context of operant conditioning, threat based advertising executions that facilitate higher levels of fear are thought to be more motivational than those that produce lower levels of fear. Importantly here, both combination and punishment reinforcement approaches are supportive in their design of threat based advertising practices. However going one step further, when comparing the punishment reinforcement styles with the combination reinforcement styles, the *combination reinforcement* advertising most effectively encapsulates all of those extra important elements that are recommended for successful threat based advertising (Witte & Allen, 2000). This is because the combination appeal not only

can include high levels of *severity*, *susceptibility* and *strength of appeal* but it can also include the important ingredient of “*self-efficacy*.” This self-efficacy is said to be a necessary ingredient that is needed to reduce those inhibiting effects described by Rogers (1983) and Witte and Allen (2000).

Recapping, the viewer of the threatening advertisement is more likely to internalise a message if they believe they personally have the ability to take some kind of corrective action that might remove the threatening stimulus. The comparative advertising appeal has as part of its design a portrayal that demonstrates the techniques adolescents might use to avoid a bad choice in a drinking situation. In effect, in script form, the advertisement demonstrates to the adolescent that avoiding compromising situations with alcohol can be done quite easily and as a consequence, they can enjoy increased success, both in a social and physical sense.

Table 3.3: A matrix summarising the level of persuasiveness of the three operant conditioning approaches described by Roger’s (1983) protection motivation theory

Positive Reinforcement		Punishment Reinforcement		Combination Reinforcement	
Important Threat Based Advertising Elements		Important Threat Based Advertising Elements		Important Threat Based Advertising Elements	
Severity?	Low	Severity?	High	Severity?	High
Susceptibility?	Medium	Susceptibility?	Medium	Susceptibility?	High
Strength of appeal?	Weak	Strength of appeal?	High	Strength of appeal?	High
Self-efficacy?	High	Self-efficacy?	Low	Self-efficacy?	High

Table 3.3 is presented here because it demonstrates this point through the use of a matrix that includes the three different reinforcement approaches together with their persuasive strengths and weaknesses. By looking at this table it becomes possible to see that theoretically, one might expect to see the combination advertising type execution perform most strongly, followed by the punishment execution.

Research on operant conditioning supports positive reinforcement as being a legitimate conditioning method (Thorndike 1889; Skinner, 1969). However more recent models such as curvilinear model by Ray and Wilkie (1970), the protection motivation theory by Rogers (1983) and a meta-analysis by Witte and Allen (2000), provide evidence to suggest that positive reinforcement appeals are unlikely to work as well as the more threatening approaches that facilitate fear. With this in mind, it will not be argued that the positive approach does not work but rather, it will be suggested that the other approaches using the combination and punishment reinforcement advertising executions will be more effective.

In light of the discussion on threat based advertising appeals, following are the three operants that are re-presented in hypothesis form. These hypotheses are specifically worded to test the effectiveness of each of the operant conditioning approaches when they are used in the context of *television advertising targeting adolescents on alcohol restraint*. These three hypotheses therefore, take the following form:

- H1: The *combination advertising execution style* will be more effective in producing positive attitudes in adolescents towards the advertisement (+A_{ad}) than both the punishment and the positive advertising execution style
- H2: The *combination advertising execution style* will be more effective in producing positive attitudes in adolescents toward the cause (+A_c) of reducing adolescent

binge drinking than both the punishment and the positive advertising execution style

H3: The *combination advertising execution style* will be more effective in producing a greater intention to use restraint when consuming alcohol or refrain from using alcohol altogether (+A_{act}) than both the punishment and the positive advertising execution styles

These three hypotheses that have just been presented constitute the topics of primary focus for this study.

3.4 Summary

This chapter has presented information that justifies the upcoming study. This chapter has discussed how attitudes towards an object and an advertisement are important factors that are very likely to influence the effectiveness of any advertising portrayal. It was therefore suggested that this area of attitudes was an area that might be measured as an indicator as to the likely future effectiveness of any proposed adolescent anti-binge drinking advertising executions. This chapter also revisited the area of operant conditioning and discussed how the operant conditioning model could be applied to the area of adolescent anti-binge drinking advertising.

After further revision of previously discussed theory into threat based advertising appeals the hypotheses were formulated and presented. The three hypotheses were presented with the expectation that the combination portrayal was most likely to be the most effective advertising approach of the three portrayals. Chapter four will now outline the methodology behind the upcoming study. Chapter

five will the present the findings while chapter six will contain discussion on the findings.

Chapter Four – Methodology

4.0 Introduction

This research thesis is interested in studying three different television advertising approaches that could be used by health promotion planners to reduce adolescent binge drinking. Anecdotal evidence has suggested that television advertising is an appropriate communication tool for reaching and influencing adolescent consumers. For example, Atkin (1993) believed adolescents start forming attitudes and experimenting with alcohol at a time when they are also being heavily exposed to television. Atkin felt that adolescents were likely to be responsive to televised portrayals of drinking in entertainment programs and commercials for a number of reasons including:

- 1) Television viewing time peaks at this age
- 2) Young people depend relatively heavily on television for understanding and guidance on why alcohol is consumed, its benefits and its drawbacks
- 3) Young adolescents' low level of experience with alcohol and their limited opportunities for direct observation of drinking by others (especially in bars and at parties) makes them more susceptible to the processes of cultivation and more receptive to vicarious observational learning
- 4) The attitudes and values of young people should increase their receptivity to certain televised appeals associated with drinking and to certain role models who are depicted in drinking roles

So consequently, Atkin argued there are grounds for the expectation that television advertising is an appropriate tool for communicating to adolescent consumers.

In an attempt to try and prove the likely effectiveness or lack thereof of the three different television advertising portrayals, a methodology has been devised for the collection of data thought to be appropriate for this purpose. To this end, this chapter details the methodology used in this study. Topics covered include the sample frame, the sampling method, drawing the sample, sample size, the procedure undertaken to gather the data and the ancillary materials needed to conduct the study.

4.1 Data Collection

4.1.1 Sample and Sample Design

The sampling frame chosen for this study comprised year 9 and year 10 (14 - 15 year-olds) students from five co-educational, Government run metropolitan schools in Perth, Western Australia. This section discusses the reasoning behind choosing this age group and the particular schools.

Year 9 and 10 (14 and 15 Year-Olds)

The majority of year nine and ten students are 14 and 15 years old. This age group is entering the age group that Elliott and Feldman (1990) referred to as middle adolescence. This group was chosen for this study for the following reasons:

1. Research has reported sharply increased incidence of binge-drinking in recent years in this group compared with older groups (Health Promotion Services, 2000b). The NDSHS (1998) found that alcohol usage by 14-19 year olds had

increased from 54 per cent in 1995 to 73 per cent in 1998. Furthermore, this period is thought to be when adolescents are being most influenced by others (Costanzo, 1970; Collins & Thomas, 1982)

2. The Health Department of Western Australia (HDWA) research highlighted “an expectation held by many young drinkers aged between 14 to 16 to get drunk in most drinking situations” and that this type of behaviour was the norm (Health Promotion Services, 1997b, p.2).
3. The 14-15 year-old age group also fits neatly into the 12-17 age group that is often targeted by social marketers in their adolescent television campaigns, such as the Western Australian “*100% in Control*” campaign or the Commonwealth Government’s “*Choices*” campaign.
4. The literature on adolescents suggests this *young adolescent* period is a particularly tumultuous time for young people when a lot of experimentation and risk taking occurs. Elkind (1967) for example suggests egocentrism has a distinct character in adolescents prior to about age 16 which gives rise to those highly relevant personality traits common to the period known as the *imaginary self* and *personal fable*.

The Sample Distribution Across Genders and Ages

This research study will attempt to include an equal representation of both year nine and ten students of both male and female gender. This is expected to occur naturally because Government Secondary Schools tend to be practically identical in their splits between male/females and between year nine/year-ten, for example:

- 3) The Western Australia Department of Education (WADE) census data over recent years suggests, in the years prior to year eleven both male and female

retention rates are practically identical (<http://www2.eddept.wa.edu.au/>, 2001)

- 4) Government secondary schools in year nine and ten have similarly sized student populations. Data drawn from the WAEDC indicates that in Semester 1, 2000, there were 18,400 year 9, and 18,260 year 10 secondary school students. This comprises a variation between years of less than one per cent suggesting it would be representative to have half of the data come from each school year

(Western Australian Department of Education Census, 2000).

It is also important to understand that it is appropriate to target both genders for this study with equal interest because alcohol misuse is a problematic and pressing issue for both genders. For example, research by Shanahan and Hewitt, (1999) concluded that women are now drinking in a way that is very similar to traditional male drinking. The National Drug Household Survey (1998) also indicated that in the 14-19 year old age group, women are just as likely to be regular drinkers as males. Over recent years, Australian data on alcohol usage now generally shows that the prevalence of binge-drinking in people aged fourteen to seventeen occurs more often in females than males (National Alcohol Strategy, 2003).

Perth Metropolitan Schools

Perth metropolitan schools have been chosen for this study for the following reasons:

- 1) The majority of the Western Australian and Australian population are metropolitan therefore this study would be of most use if it had a metropolitan focus.

- 2) Alcohol consumption and alcohol problems in many regions of Western Australia are often different, suggesting that to keep the results generalisable, rural and regional areas might best be treated as a distinct research unit in another study. For example, excessive alcohol consumption is often more of a problem in regional areas in Western Australia than it is in Perth metropolitan areas (Health Promotion Services, 1996c).
- 3) There are more than enough schools with large student populations within the Perth metropolitan area to draw a large sample. For example, there are 40,748 students studying in the Perth metropolitan school districts that adequately fit into the sample frame for this study (WADESC, 2001, <http://www2.eddept.wa.edu.au>).
- 4) Collecting the data in metropolitan schools takes less time and is more cost effective than regional and rural schools.
- 5) Private secondary schools cannot be included because they have a policy of not allowing researchers into their schools to conduct research.

4.1.2 Sample Size and Drawing the Sample

Sample Size

The determination of the appropriate sample size for a study is a crucial element in marketing research (Zikmund, 1997). While matters such as sample selection bias and systematic errors are of concern and need to be accounted for, in general it is accepted that the larger the sample size the more accurate the research (Zikmund, 1997). In statistical terms increasing the sample size decreases the width of the confidence interval at a given confidence level. With this in mind, this study was designed to generate what was thought to be a large enough sample size to produce statistically valid results while at the same time still be realistic in its scope.

The total sample size that was considered necessary for this study was *at least* 400 respondents with an intention to get 600 responses if reasonably possible. The sample size was not set at one cut-off point because realistically, there were certain vagaries associated with this targeted population of respondents. These vagaries come about because of conflicting information from other academics and school teachers regarding: 1) the amount of access to the respondents that might be attained; 2) the likelihood of cooperation by the staff at schools; 3) the level of goodwill or lack thereof by students toward this study. All of these considerations created a sense of uncertainty about expectations regarding the eventual sample size.

The sample size of 400 was thought to be the minimum size acceptable for this research study (Mizerski, 2001, Personal Communication, 18 Sept, 2001; Leong, Personal Communication, 15 Sept, 2001). This minimum figure was thought to be necessary because this research design would require a data set large enough to allow for a reasonably robust statistical analysis, where both descriptive and inferential statistics could be used. Ideally the larger sample of 600 was anticipated and this would therefore allow the data to be for example, cross validated using split sample validation methods to ensure the sample findings fit when a new sample is drawn from the general population (Hair, Anderson, Tatham & Black, 1998)

To support the use of the sampling approach used in this study, Zikmund (1997) has suggested that under certain circumstances, sample size can be determined using the judgment of the researcher. Using the criteria outlined by Zikmund for the use of a judgment sample approach, an explanation is provided on how the sample was determined. Justification for this sample size included considerations such as:

- 1) Previous studies that have been widely accepted and peer reviewed as “good marketing research studies” in social marketing and advertising have had sample sizes similar to the sample size used in this study. In some cases

some of these well regarded studies by other researchers have had even smaller samples.

- 2) A sample size of 400 plus, allows for data analysis of various subgroups within the total sample. For example, analyses in this study will be more informative when subgroups such as year-nine and year-ten can be compared and male and female with at least 100 responses in each sub-group. According to this procedure, the total sample size is computed by totalling the sample sizes necessary for each subgroup (Zikmund, 1997).
- 3) It was believed that to attain a sample much larger than this would create additional problems for example, getting more access to the schools, more time would be required to collect and analyse the data and more expense would be incurred.

Drawing the Sample

This study used a *cluster sampling* method known as *two-stage area sampling*. The sample is called two-stage cluster sampling because the sample elements being the schools, are drawn probabilistically from each selected cluster being the school districts. Using this approach, four geographically different metropolitan school districts were chosen as the clusters that this study drew upon and all subject schools for the research were confined to elements that are only within these clusters. A probability technique was used to randomly select elements, or in this case schools, from within each pre-determined cluster. The reason for using a cluster sampling method is that it allows the researcher to undertake the research in an economical way while still retaining the characteristics of a probability sample (Zikmund, 1997). Therefore, the procedure that was used was as follows:

STAGE 1 - Drawing the Schools Districts

Using simple random sampling, four schools districts were drawn from the target population of *all* seven metropolitan school districts. These seven Perth metropolitan school districts included: 1) Fremantle; 2) Cannington; 3) Swan; 4) Perth; 5) Midlands; 6) Peel; 7) Joondalup. This is thought to be important because a good representation of adolescents from a variety of socio-economic and psychographics backgrounds was thought to be desirable. After conducting this procedure, the schools that were drawn included: 1) Fremantle; 2) Cannington; 3) Perth and; 4) Joondalup. These areas can be viewed in the map contained in Figure 4.1. As the map suggests, these four school districts afford the research design a broad geographic representation of all elements in the sample frame.

1) Joondalup District (school 1): One school was drawn from this district.

Joondalup District is the sixth largest school district in the Perth metropolitan area with 5943 secondary school students in full time study during semester 1, 2001. Joondalup District has eight senior high schools in this district that stretch from Padbury in Perth's Northern suburbs through to the northern regional area of Gingin. This district is very large and stretches for perhaps 50km to the North of Padbury.

2) Perth District (schools 3 & 5): Two schools that participated in this study came from this district. Perth District is the third largest school district in Western Australia with 11,771 secondary school students in full time study during semester 1, 2001. Perth District has eleven senior high schools that stretch from around Greenwood and Woodvale in the North, through to Coolbinia and Mount Lawley in the East and back to Subiaco near the city.

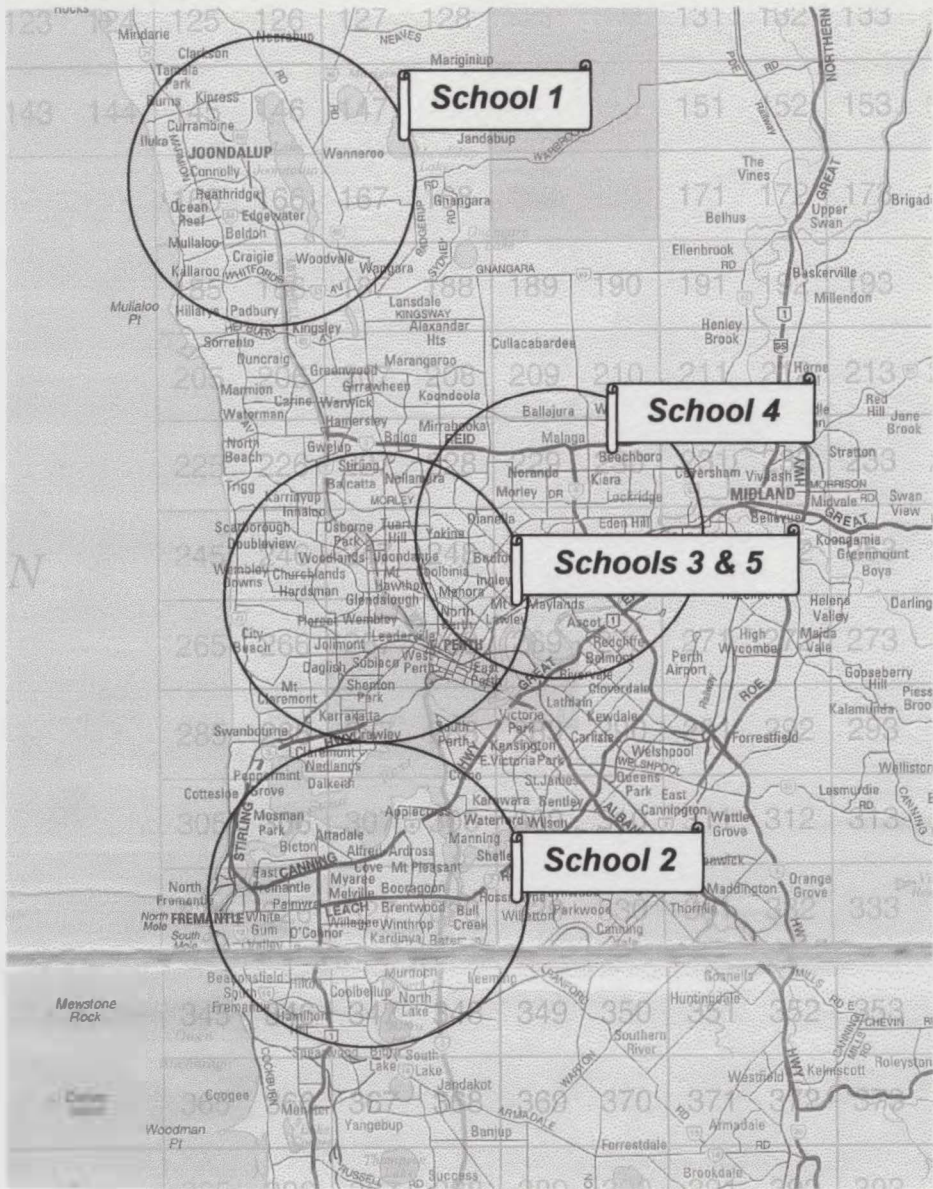


Figure 4.1: A map of Perth that shows the epicentre of the four school districts chosen for this study

3) Cannington District (school 4): One school came from this district.

Cannington District is the fourth largest school district in Western Australia with 10,016 secondary school students in full time study, semester 1, 2001. Cannington District has nine senior high schools that stretch from Armadale in the East, to Gosnells in the South East.

- 4) **Fremantle District (school 2):** One school came from this district. Fremantle District is the second largest school district in Western Australia with 13,018 secondary school students in full time study, semester 1, 2001. Fremantle District has nine senior high schools that stretch from Armadale in the East, to Gosnells in the South East.

STAGE 2 - Drawing the Schools

Using simple random sampling which involved drawing a school name from a hat of all possible schools in that school district, one school from each of the four school districts previously identified was chosen. Recapping, *Perth, Cannington, Joondalup* and *Fremantle* school districts where those from which the schools were ultimately chosen. Each school district had between six and ten senior high schools. The four schools selected were then approached and asked to participate in the study.

Initially, one school in the Perth district declined because it was thought many of their students and teachers were involved in a school camp during the study period. This camp later turned out to be at an earlier time. With this obstacle removed, the school then offered to participate in this study. In the interim however, another replacement school was found to participate in the study. Rather than turn away either of the schools it was decided to include both schools in the survey to increase the sample size and to cover any loss in the sample population through late withdrawals of other schools or students. As a consequence, there were five schools involved in this study instead of the four that were initially planned for. Two of these schools were therefore drawn from the Perth District. Tables 4.1, 4.2 and 4.3 provide Western Australia Education Department (2001) demographic, geographic and psychographic profiles of the schools that participated in the study.

There was an expectation that not every school randomly drawn would or could participate. Communications with the Western Australian Department of

Education indicated that since October 8, 1992, consistent with the process of devolution in Western Australia education, each school has the right to allow or disallow researchers into their schools (see Appendix 1). With this in mind, one might expect the research to be received differently according to the school's ethos, staffing or immediate circumstances. Some of these circumstances might include for example:

- The school staff might feel that this type of research will be disruptive to their students and their teaching schedules
- The school may be involved in some other very important activity at the time of the study such as school camps, exams, etc
- Concerns might even exist that the research results might ultimately reflect poorly on the school or its students and staff

Subject School One				Subject School Two			
<i>School District</i>	Joondalup	<i>Staff Numbers</i>	114	<i>School District</i>	Fremantle	<i>Staff Numbers</i>	108
<i>Number of F/T Students</i>	1382	<i>Other: Aboriginal Students</i>	0.4%	<i>Number of F/T Students</i>	935	<i>Other: Aboriginal Students</i>	10%
<i>No. of Year 9 Students</i>	296	<i>No. of Year 10 Students</i>	327	<i>No. of Year 9 Students</i>	199	<i>No. of Year 10 Students</i>	226
<i>Other: School Overview</i> <ul style="list-style-type: none"> This school could be considered a young school having been opened since the mid 1980's. This school is in a coastal suburb approximately 20 kilometres north of Perth. The school appears to have a predominately, Anglo-Saxon population, and to be above average in its facilities. Services include a Youth Education Officer, a School Psychologist, School Nurse and two computer teachers/technicians comprise the specialist staff. This school claims it is a desirable teaching post and the school enjoys a low turnover of staff who have an average age of 42. This school boasts a technology focus with for example, a network which allows individual students to access the internet and their own personal space on the file server. The school has about 400 modem computers throughout the school. This school advocates the need for a strong work ethic by staff and students. An extensive reward system reinforces the view that students must strive to reach their potential and reject mediocrity. Apart from the traditional TEE subjects, there is a network of business and computing subjects and a large collection of specialist subjects including VET, Marine & aquaculture studies, gifted and talented studies, French and Japanese are special subjects at the school. 				<i>Other: School Overview</i> <ul style="list-style-type: none"> Subject school two is located SW of Perth City. These school students come from a diversity of areas such as suburban, semi-rural and industrial areas. This school community has been described as low socio-economic, multicultural, non-professional, attaining relatively low income. 30% of the students are said to belong to families where at least one parent was not born in Australia. Predominant nationalities include Italian, Croatian, Serbian and Portuguese, although many additional ethnic origins are represented. The Aboriginal student population is approximately 10% of the total population. The school argues that despite the diversity of ethnic groups alongside the still predominant Anglo Australian culture, they exhibit a great deal of acceptance, with race tensions being a rare occurrence. The school asserts that the lower educational levels attained by their parents (shown in census figures), as well as in many cases their lack of familiarity with the English language, results in an educational disadvantage for those at this SHS. At the upper school level, Tertiary Entrance and Certificate of Secondary Education courses are offered along with Clerical, Hospitality and Tourism, Aboriginal, Industrial and Information Technology, Educational Support Post Compulsory Vocational Programs. This diversity has led to an increased student retention rate in Year 11. 			

Table 4.1: A brief overview of the schools that were chosen for this study

Subject School Three				Subject School Four			
<i>School District</i>	Perth	<i>Staff Numbers</i>	137	<i>School District</i>	Cannington	<i>Staff Numbers</i>	96
<i>Number of F/T Students</i>	1412	<i>Other: Aboriginal Students</i>	0.6%	<i>Number of F/T Students</i>	947	<i>Other: Aboriginal Students</i>	5%
<i>No. of Year 9 Students</i>	275	<i>No. of Year 10 Students</i>	303	<i>No. of Year 9 Students</i>	195	<i>No. of Year 10 Students</i>	238
<i>Other: School Overview</i> <ul style="list-style-type: none"> This school is approximately 10 kilometers North West of Perth and would take in many of the coastal and slightly inland suburbs in this region. This school is said to have a student base that is generally slightly above state average in ability. Parents are mostly professional, and business people who are supportive of the school. They have high expectations of their children and the school. Parents and staff are said to be very involved in activities at the school and are invited to make contact with each other when specific needs arise. The school population appears to be very Anglo Saxon in appearance. 				<i>Other: School Overview</i> <ul style="list-style-type: none"> Subject school four is the oldest Government SHS south of river. Approximately 45% of students are in specialist courses, the majority drawn from outside the catchment area. There is a broad mix of socio-economic groupings both from within the catchment & outside. Subject school four boasts a highly experienced, innovative staff; and the school is often involved in specialist courses including Aviation Studies, Cricket, Tennis, Fashion and Design - all have strong parent support groups / fundraising groups. P&C are said to be highly supportive of the school. Parents are said to be willing to tackle issues of importance to the school community and parents and students are said to be involved in most school committees / working parties. A Chaplaincy, AIEO and School-based Police Officer are on site at this school. 			

Table 4.2: A brief overview of the schools that were chosen for this study

Subject School Five			
<i>School District</i>	Perth	<i>Staff Numbers</i>	92
<i>Number of F/T Students</i>	921	<i>Other: Aboriginal Students</i>	0.8%
<i>No. of Year 9 Students</i>	183	<i>No. of Year 10 Students</i>	207
<p><i>Other: School Overview</i></p> <ul style="list-style-type: none"> • This school is situated in a western coastal suburb of Perth. • With a comparatively large upper school student population, the school says they are able to offer a wide variety of courses for senior students, who are then able to go on to University, TAFE or employment. • This school believes that it is a sought-after school amongst teachers and as a result of this, there is a stable, experienced and highly committed teaching body. • Pastoral care is an ongoing school priority and a strong student services team exists to promote and monitor student welfare. • In addition to the usual array of subjects offered at a metropolitan high school - English, Maths, Science, Society & Environment, Home Economics, Art, Design, Information Technology, Physical Education and the like – this school also offers courses in French and Music. • This school argues that over the years it has developed a strong reputation as a school with very high academic standards. Suggesting this has come about through the quality of the students and the support of their parents, the considerable expertise of the school's teaching staff and the constantly improving resources and facilities the school provides. 			

Table 4.3: *A brief overview of the schools that were chosen for this study*

The key persons to approach when getting access to the schools were found to be the Physical Education Teachers rather than the Principal because this study was highly relevant to health and physical education classes. Generally the Physical Education Teachers were very approachable. However, to increase the effectiveness of the school recruitment efforts, the following measures were considered to be appropriate. The researcher undertook to:

- 1) Stress the importance of the research and its relevance to the school students themselves
- 2) Reassure each school that their data will not be identified in the public domain as belonging to that school
- 3) Reassure the participating teachers that the research will be conducted as efficiently as is possible
- 4) Suggest the research take place in “Physical Education and Health Education” classes where the subject has relevance
- 5) Ensure the research does not occur during critical time periods such as end-of-term exams, school camp periods or during revision periods
- 6) Assure the school that parents and students would be properly informed of the study and given the opportunity to withdraw if they chose to do so

In addition to this, guarantees were given that students rights shall be observed by not only providing them with freedom of choice as to whether they wished to contribute to the study, but also they will be given the reassurance that if they do choose to participate in the study, their responses will be confidential and anonymous.

The four schools initially drawn for inclusion in this study were approached first by phone, then by subsequent correspondence including letters, faxes and emails. The purpose of this correspondence was to provide the schools with information on: 1) Who was required for the study; 2) What facilities were required; and, 3) The anticipated time needed to conduct the study. The correspondence also included the necessary reassurances regarding university ethics clearance and confidentiality.

As anticipated, not every school was enthusiastic about helping with the research. Three schools that were approached declined for the following reasons:

- 1) They felt they had already participated in too many studies during the year
- 2) They felt it was too inconvenient at the time the study was scheduled
- 3) The teachers believed that there was a lack of class time left that term

Where schools decided they would not or could not participate, another school was randomly drawn from that school district to identify a new candidate. These potential participants were then approached.

4.1.3 Ethics and Ethical Measures

The Market Research Society of Australia has ethical guidelines that need to be complied with when researching children and adolescents, as do the universities and schools themselves. This is particularly true where issues under investigation are of a delicate nature. Edith Cowan University also had strict guidelines that had to be complied with if the study was to be approved. To comply with the ethical requirements of these groups a research proposal was submitted to the university

Ethics Committee for approval of the research design. The research design was subsequently given ethics clearance.

As a requirement of the Edith Cowan Ethics Committee, a week prior to the study taking place, a letter informing parents of the study was handed to each student by their teacher and sent home. The purpose of this letter was to explain: 1) what the research was about; 2) what was required of their children; 3) any possible side effects of the study and; 4) the value of the study to the school, or the wider community. The Ethics Committee required that all students take the forms home and return these only when both the parent and the child had read and signed this form.

It soon became apparent that the expectation of the students and their families to get the letters back to the school was unrealistic even though an incentive was attached to these letters. This incentive came in the form of a chance for one student in each class to win a double movie pass (see Appendix 2). When asked about the requirement to get the letters signed and returned, four of the five teachers from the schools involved in this study assured the researcher that from their experience of sending notes home, the response rate would be very low. This realization had a number of implications on the research design, for example:

- 1) The study itself - the sample size would be drastically reduced if many of the students could not participate in the study. As a result, this would require the researcher to commit even more resources to comply with the original research design and its required sample size.
- 2) More participating schools would be required to get involved to increase the sample size.
- 3) The teachers assisting the study would be burdened with chasing up outstanding letters.

- 4) If only those students who returned the letters to the teachers were allowed to participate in the study, many non-participating students would be excluded on the day and require extra supervision. Two of the teachers said they would not participate in the study if this were the case because of the extra supervision required.

Under this scenario, where students and their parents were required to “opt-in” to the survey because of this poor response rate there would be pressure to reduce the sample size to keep the project within reasonable parameters. To remedy this situation, a number of the teachers suggested that letters still be sent home for the purpose of complying with the need for disclosure and respondent education but the requirements of respondents would change from an “*opt-in*” option to an “*opt-out*” option. For example, rather than requesting that students and parents indicate that *they do* want to participate in the study, an “*opt-in*” option, this new research design scenario would ask that students and parents only indicate on their return slip if they *do not* want their child to participate. This being an “*opt-out*” option.

This “opt-out” option was then re-presented to the ethics committee at Edith Cowan University for clearance (see Appendix 3 and 4). This letter to the Ethics Committee included a detailed explanation of the problem and the alternative course of action. After their consideration, the Ethics Committee deemed this approach as being acceptable to the university with one provision. This provision required all students participating in the study to sign a form on the day to indicate they understood the study and that they were willing to participate. Therefore, the new requirements for recruiting participants for this study were twofold:

- 1) Revised ‘opt-out’ letters would be sent home with the students one week prior to the study explaining the purpose and procedure of the research before asking parents to indicate and send back the letter only if they did

not give permission for their child to participate in the study (see Appendix 4)

- 2) Then on the day of the study the researcher was required to get all participating students' signatures at the start of each research session to indicate that they understood what the research was about and they understood what was required of them and they were willing to participate in the research.

4.2 The Research Materials and Research Process

4.2.1 The Research Stimulus

This study used a VHS animatic as the test stimulus. This animatic depicted six different adolescent drinking portrayals, three directed at males, and three directed at females. Belch and Belch (2003) describe an animatic as being a videotape of a storyboard that includes a soundtrack.

The "Animatic"

Initially a storyboard was produced along with an accompanying script. However, this presentation was thought to lack the necessary realism. The storyboards were also thought to be a slow and cumbersome presentation technique to use with adolescents in a school setting. To improve the realism and practicality of the study, a copy of the Commonwealth's Alcohol and Other Drug's *'Choices Where are Yours Taking You'* television commercials was obtained from the Campaign Manager of the Commonwealth Governments, Alcohol Campaign Office in Canberra. This television campaign advocated that adolescents use restraint when

drinking alcohol in order that they might avoid unpleasant outcomes while conversely maximizing positive outcomes.

It was mentioned in Chapter Two that this advertising campaign could be considered to be quite innovative because it used an emotional appeal that is executed using a combination of both punishment reinforcement and positive reinforcement styles all within the same communication. The advertisement was also thought to be innovative because it did not say *don't drink* but rather *use restraint*. It also purposely went about getting adolescents to think about the way they choose to use alcohol while at the same time challenging them to take control of the way they use alcohol.

The original advertisement needed to be re-edited to produce six different animatic portrayals. The advertisement in its original form would not be capable of measuring the three different advertising executions in isolation, hence the need for re-editing. These six re-edited portrayals were to become the test stimulus used in the schools. Using the media facilities at Edith Cowan University the *Choices* advertisements were digitised using editing suites software to produce a number of stills that could then be saved onto CD ROM. After these stills were saved they were rearranged and represented to produce the following storyboard portrayals:

- One x 7 frame *male* storyboard
- One x 8 frame *female* storyboard (*Positive reinforcement* execution)
- One x 9 frame *male* storyboard
- One x 8 frame *female* storyboard (*Punishment reinforcement* execution)
- One x 14 frame *male* storyboard
- One x 12 frame *female* storyboard (*Combination* execution)

Figure 4.2 is an example of just three of the images taken from the male VHS commercial. These would be used to produce the stimulus that comprised the male punishment reinforcement execution. The first edit of the male storyboards can be seen in the Appendices (Appendix 7).



Figure 4.2: *Three images from the Commonwealth Government's "Choices" adolescent alcohol campaign*

During the process of re-editing and presenting these communications considerable effort was made to try and maintain the original levels of realism and vividness of the original communications, keeping in mind the constraints of the research design. Previous research has suggested appraisals of communications can be biased by heuristic judgements such as the vividness of the source of information (Tversky & Kahneman, 1981; Nisbett & Ross, 1980). Rogers (1983) explains that if people depicted in fear appeal messages were upset by a health threat such as heavy drinking, and these people were similar to the target audience, the target audience's intentions to protect themselves through moderating their alcohol use would be stronger than if people depicted in the message were not upset and were dissimilar to themselves. In addition to these issues of vividness and relevance, adolescents have been identified as a tough group to communicate with. They can be relatively discriminating of communications with a tendency to lean toward scepticism or cynicism where they are just as likely to dismiss marketing communications because they deem them to be passé or irrelevant, or unpalatable.

To complement the images, a voice-over script was then produced to run in unison with each of the scenes on the portrayals. Key points were made in the dialogue that clearly assisted the audience to differentiate the outcomes portrayed in each advertising scenario with the attitudes and behaviours of the characters in that portrayal. Language was also chosen that was informal and contained jargon or more common Australian colloquialisms. Figure 4.2 is re-presented here as Figure 4.3 and is an example of the storyboard animatic with the voice-over script. The full version of the male and female storyboards and scripts can be viewed in appendix 7.



Scene 4 - VO: *Andrew decides to grab the scotch & he gets stuck into it with his friend Luke. The girls are getting left out & Andrew & Luke keep falling behind & carrying on. Andrew doesn't care, he figures if your not going hard you may as well go home.*



Scene 8 - VO: *Andrew gets knocked to the ground by this guy who tells him he's a jerk. Andrew gets up to help Cassie but everyone in the street tells him to just get lost.*



Scene 9 - VO: *Andrew's too wiped out to even try to fix things. Cassie's been taken home, or to the hospital maybe. He's on his own. He thinks to himself, why did I drink all that booze? I'm an idiot!*

Figure 4.3: Three images that include the script that was used in the finished animatic

Three of the initial female concepts were tested on 41 year-nine students in a Senior High School on the Central Coast of New South Wales. This process was worthwhile because it picked up a number of language problems that were subsequently improved prior to the voiceovers being introduced to the animatic. This exercise did however demonstrate the problems that were likely to be

encountered with this upcoming research study. Some observations that drew concern include:

- The returned response sheets demonstrated that teenagers on the Central Coast of New South Wales had their own provincial vocabulary that appeared to differ in some respects to what might be considered mainstream in Perth
- A number of the returned response sheets were defaced with expletives and other drug related comments included
- It was reported that there appeared to be a general lack of goodwill towards the proposed research exercise

The teacher at this school did however indicate that she felt that the students in this group were not particularly sophisticated and they were a generally unsettled group, even within this school population (Sexton, Personal Communication, 5th October, 2001). In addition to this observation this teacher also commented that this school and its students were in a lower socio-economic group where it was perhaps felt that alcohol and other drug use was more mainstream within their community than might otherwise be expected across a broader range of schools.

Once the storyboards were edited and the storyboard scripts were completed, the compact disc containing the images along with the script were taken to a commercial video producer for 'tidying-up' and to record voiceovers that were then subsequently overlaid with the images. Both male and female talent were recruited to do these voiceovers. Both of these recruits were in their early twenties and had training in media and drama. As a consequence, these recruits projected the youthful voices needed for the animatic. Once the voiceover component was completed, background or ambient noise was then overlayed. This ambient noise was recorded

at Northbridge in Perth on a Saturday night and included crowd noise, vehicle noise and nightclub music.

The finished animatic was then produced into three different formats for each gender. This was done for the purpose of assisting the fieldworkers in executing the study where the order-of-presentation would be rotated with each new school class of participants. Table 4.4 is a depiction of the six finished videos.

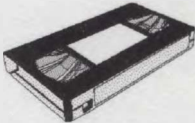
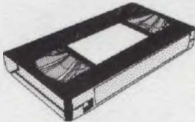
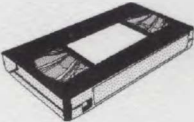
<div>1) Female Portrayal:</div> <div></div> <div>Positive > Punishment > Combination</div>	<div>1) Male Portrayal:</div> <div></div> <div>Positive > Punishment > Combination</div>
<div>2) Female Portrayal:</div> <div></div> <div>Punishment > Combination > Positive</div>	<div>2) Male Portrayal:</div> <div></div> <div>Punishment > Combination > Positive</div>
<div>3) Female Portrayal:</div> <div></div> <div>Combination > Positive > Punishment</div>	<div>3) Male Portrayal:</div> <div></div> <div>Combination > Positive > Punishment</div>

Figure 4.4: The Animatic with all six alcohol portrayal, 3 x Male and 3 x Females

4.2.2 The Questionnaire

Two multi-item questionnaires (Version 1 and Version 2) were used for this study to capture the necessary data on each of the areas relevant to the research hypotheses (see Appendix 5 and 6). This section will explain the components of the questionnaire along with the reasoning as to why the questionnaires ultimately took the form they did.

The questionnaire cover page explained to respondents who the researcher was and informed them that the study was being undertaken as part of a Post Graduate course being run through Edith Cowan University's School of Marketing, Tourism and Leisure. A detailed explanation was given on this cover page as to the purpose of the research, what was going to occur and what was required of the students. Reassurance was given about confidentiality and it was made very clear that respondents could "opt-out" at any time. After this cover sheet was explained to the respondents, they were then asked to sign the consent form that was passed around the class. As previously discussed, this form asked respondents to acknowledge that they understood what the study was about and that they consented to the research exercise.

The questionnaire had twenty-three highly structured questions. In many cases these questions acted simply as branched questions to ask for more detailed information. Ultimately respondents had to answer eighty one items. Sixty nine of the eleven branching questions included 5-point numeric scales. These are a type of Likert scale. In this situation, respondents indicated attitudes and likely intentions by ticking a box to indicate how strongly they felt about a particular question (Zikmund, 1997).

By identifying these specific beliefs and combining them, researchers can derive a measure of the consumer’s overall attitude towards the stimulus or topic of interest (Solomon, 1999). These 5-point scales provided good control for obtaining relevant data and to comprehensively cover the attitudes and intentions of the adolescent respondents. Furthermore, scales are generally accepted as being easier for adolescent respondents to understand and answer (Zikmund, 1997). An example of one of the 5-point questions used in this study can be viewed in Figure 4.4.

Health authorities try to talk to the community to stop them drinking too much alcohol. They talk to them by using brochures, through doctors, by using TV ads, by visiting schools, they sponsor sport, just to name a few methods.

	Strongly Support	Support	Neither Support nor Oppose	Oppose	Strongly Oppose
1a) Would you support the health authority’s attempts to talk to the <i>general community</i> about not drinking too much alcohol?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Figure 4.4: Question 1a is an example of one of the 5-point attitudinal questions asked in the survey

Other questions included one ranking question that asked respondents to rank their preferences for advertising goods and services from particular product categories. An extract of this question appears in Figure 4.5.

Another question asked respondents to spend \$10 as they see fit on any of the three alcohol health promotion initiatives. This type of question was a modified version of the one that appeared in a research paper by Donovan et al. (1998) that asked the respondent to spend \$100. However, in this study it was decided the younger respondents would allocate \$10 more quickly and accurately than \$100 (see Figure 4.6).

Thinking about your favourite ads I see on TV, how would you rate the following ads in terms of being of interest to you...?

Note: Rank these from 1 to 7 where: ‘7’ is “Most Interested” to ‘1’ is “Least Interested”

Ranking means to put things in order according to which is most preferred too least preferred. Better still, think of a race where someone has to come first, second, third etc. For example, clothes might be 1, the cars might be 2, soft drink might be 3, etc.

Note: You can't use a ranking of say 3, more than once. Each rank can only be used once.

Advertisements for....	Ranking (1 – 7)
Athletic Shoes	I rank.....
The Environment	I rank.....
Preventing Alcohol Misuse	I rank.....

Figure 4.5: A section of the seven item ranking question from within the questionnaire

The remainder of the questions in the questionnaire required tick-a-box responses to either categorical or ordinal scaled questions. These scales were chosen because they are easy to read and answer (Zikmund, 1997). Even though these scales are considered to be inherently easy to work with, every effort was made to make these questions as concise and clear as possible. Special attention was given to the wording of the questions and the ease and speed with which adolescent respondents could respond (Zikmund, 1997). An example of an ordinal scale that was used in this study can be viewed in Figure 4.7.

If you were given \$10 to spend on <u>reducing</u> alcohol abuse in the community, to the nearest dollar, how much would you spend on each of these areas:		Enter the whole dollars only (for example \$3, \$2, \$5)
6a) Education (in school, information services, advertising)	\$	_____
6b) Treatment (counselling, therapy)	\$	_____
6c) Law Enforcement (e.g., stop illegal sale or use)	\$	_____
	\$	10
Check your total equals		

Figure 4.6: This question required respondents to allocate money within the community as they saw fit in order that they might reduce alcohol abuse

If you said you ‘have drunk alcohol’ before, then how would you currently describe the way you use alcohol?

<input type="checkbox"/> Don’t currently drink	<input type="checkbox"/> Drink every few months
<input type="checkbox"/> Drink every day	<input type="checkbox"/> Drink once or twice per year
<input type="checkbox"/> Drink once a week or more	<input type="checkbox"/> Less often
<input type="checkbox"/> Drink about once a month	

Figure 4.7: An example of an ordinal scaled question used in this study

Question 20 (see Figure 4.8) asked respondents to indicate how much they usually drink each time they drank alcohol. The respondents had been taught in their health classes what constitutes a “Standard Drink,” but it became clear after administering the questionnaire to the first class of approximately 25 respondents that Question 20 was too difficult. Since being taught in senior high school about *what constitutes a standard drink* the students had obviously forgotten. In

anticipation of such a problem an explanation was provided with the question as to what constitutes a standard drink. Students still could not understand this explanation.

If you said you drink alcohol, how much do you usually drink each time? Remember – A “standard drink” is a small glass of wine or a middy of beer, a nip of spirits, or a mixed drink.

<input type="checkbox"/> I Don’t Drink Alcohol	<input type="checkbox"/> 5 to 6 Standard Drinks
<input type="checkbox"/> 1 to 2 Standard Drinks	<input type="checkbox"/> 7 to 8 Standard Drinks
<input type="checkbox"/> 3 to 4 Standard Drinks	<input type="checkbox"/> More than 8 Standard Drinks

Figure 4.8: This question regarding a standard drink and judging intake was very challenging for students prior to the A5 hand-out sheet being produced

In response to this problem, a large quantity of A5 handouts were produced and handed out to each respondent (see Figure 4.9). This sheet effectively demonstrated to students exactly what constituted a standard drink diagrammatically. This in effect allowed respondents to visually gauge how much they usually drink each time.

What is a Standard Drink?



1 Shot of Spirits (like *Bourbon, Rum, Scotch, Vodka*)

1 Standard Drink



A Glass of Wine

1 Standard Drink



1 Middy of Beer

1 Standard Drink



1 Can of Beer (like *VB, Emu Bitter*, etc)

1.5 Standard Drinks



1 Pre-Mixed Alcoholic Drink (like *Stolies, Sub Zeros*, etc)

1.5 Standard Drinks

Figure 4.9: The A5 “standard drink” sheet that was handed to students

Every effort was made to design the questionnaire in a way that would reduce the opportunity for response error that occurs when respondents do not answer the questions properly. Response error may for example occur due to errors in reading and interpreting the questionnaire, or because the person answering the question is unable to express their opinion on the instrument provided to them. To overcome respondent’s inability or unwillingness to answer questions in the questionnaire, those procedures recommended by Malhotra, Hall, Shaw and Crisp (1996) and Zikmund (1997) were observed:

- The wording used in the questionnaire was checked to make sure that it was at the appropriate vocabulary level for respondents. Initially there were some problems and these were picked in a pre-test of the questionnaire with the help of 11 secondary school students.
- Questions were kept as short, concise and clear as possible to increase comprehension while reducing boredom and fatigue
- Visual and auditory stimuli were used in the form of the animatic and the “Standard Drink” handout slips that assist comprehension and give added meaning
- Those questions that might in some way be thought to be personal or threatening were asked using projective techniques and where possible, were asked at the back of the questionnaire
- Confidentiality was assured so that respondents would feel more comfortable and willing to give accurate and personal answers

The questionnaire was very structured. The questionnaire was designed this way to again, take into consideration the adolescent respondent. The structured approach allows for a more time-effective means of data collection (Zikmund, 1997). The structured questionnaire was also considered to be easier to understand, featuring repetition in styles throughout the instrument. In anticipation of more accurate results, each questionnaire statement or question is clearly stated with non-confusing alternative response items and by doing this confusion is kept to the minimum. Finally, the structured questionnaire provided for a quicker and easier data collection, coding and analysis as compared with unstructured questionnaires.

The questionnaire was of an “undisguised” type, where the respondents were firstly briefed on the content of the questionnaire and its purpose. Along with some general demographic data, the questionnaire items were quite clearly intended to measure adolescent attitudes to alcohol, adolescent attitudes toward health promotion and the advertising stimuli.

Coloured paper was used for the three different sections of the questionnaire to assist in its administration. Because of the length of the questionnaire, the fact that it had a number of sections covering different areas, and because of the varying levels of literacy among the respondents, the use of colour was seen as being one universally accepted and understood method of presentation for this questionnaire. These coloured sections turned out to be invaluable during the administration of this study.

Past research suggests colour presentations can cause difficulties for people with learning disabilities or other reading anomalies. To investigate this matter, prior to copying the questionnaires Doctor Featherstone from Edith Cowan University’s Education Faculty was approached to see whether this research presented a flaw in the questionnaire design. His opinion was that by this stage [2001], research in this area had *“been pretty much debunked, and any findings to the effect that suggest different colour presentations affected a reader’s comprehension are in the absolute minority”* (Personal Communication, November 1, 2001). As a back-up measure, Doctor Featherstone suggested perhaps carrying spare, all white questionnaires. This advice was taken and these spare questionnaires went to every subject school although they were never needed.

At nine pages in length, it was anticipated that the adolescent respondents would find this questionnaire to be longer than ideally it should be. While this did not seem to be a particular problem during pre-test, the conditions during pre-test were ideal whereas in the field these ideal conditions could not be guaranteed. In the classroom when the study is being executed on mass the researchers would be

confronted with not only varying situational factors but also adolescents of varying character and ability, all of which conspires against the likelihood of getting respondents to complete the surveys.

To try and overcome the considerable length of this questionnaire, the design characteristics of this questionnaire were crucial. The design of the questionnaire focused on matters such as: ensuring ease in answering the questions; repetition was apparent in the flow of questions was provided; coloured sections were included to guide the respondent through; and a highly structured presentation was taken. All of these design initiatives were thought to all contribute towards aiding respondents to navigate through a rather long questionnaire that might be very difficult for some to fill out. In addition to these steps, each section of the questionnaire was explained clearly before respondents attempted that section. To be sure all respondents were listening, those who finished one section early were asked to wait for instruction before going any further.

Items in the questionnaire were rotated to try and remove any suggestion of order-of-presentation bias that can sometimes create problems in this type of research. Ordering is an important issue in questionnaire design. Order bias is a bias due to responses being in a consistent order where respondents' answers are influenced by the order of response categories (Frazer & Lawley, 2000). For example, Zikmund (1997) notes, when using attitude scales, as this study does, an *anchoring effect* can occur. The first concept measured tends to be a comparison point from which subsequent evaluations are made. Randomisation of these items on a questionnaire of this type helps to minimise order bias. To avoid this problem, two versions of the questionnaire (Versions 1 and 2) were used that had different order of item presentation (see Appendix 5 and 6).

4.2.3 The Procedure

When the study was conducted

The research was conducted over a two-week period in November before the end of school term 4, 2001. This time of the year was appropriate as students had completed their important work for that semester and the teachers were more likely to make their students accessible to the researchers (Kristancic, Personal Communication, September 16, 2001).

The animatics were exhibited and the questionnaire administered during regular Health and Drug Education classes. The teachers were very open and cooperative to this study and they generally believed there was a good fit between the study content and content discussed in their classes. Furthermore, the study might be less influenced by ethical concerns because the subject of alcohol and alcohol misuse is a mainstream discussion point in these secondary school classes.

Administering the Study

The following procedure took place in the schools when administering the questionnaire:

- 1) After meeting with the teacher and arriving at class, the class was split with the females relocated away from the males. Females were usually asked to relocate because they were perceived to be more manageable.
- 2) Introductions were made, and the first five to ten minutes were spent building goodwill, explaining the study and handing out the questionnaires. Goodwill was

solicited by speaking briefly with the students in an informal way, explaining the study and letting them know that they were very helpful and indicating to them that they would get a reward of chocolate at the end of the study. Students seemed to be very responsive to this initial period of time spent building goodwill and were generally very cooperative throughout this study.

- 3) Students were then asked to sign-off on a form handed around the class indicating they understood the study and without exception all students agreed to do this.
- 4) The students were then asked to complete the ‘yellow section’ of the questionnaire, then wait for everyone to catch-up. Special care was taken to explain how questions four and six should be approached, as these questions seemed challenging for some of the students. Emphasis was made *not to hurry* because there was enough time available and the accuracy of their response was the most important thing. There was also a need to ensure that the students with lesser ability or literacy levels were given time to express themselves and in some cases were not humiliated by the process.
- 5) Once the yellow section was finished the students were congratulated for taking the care that they had and then asked to turn the page and get ready to do the ‘white section.’ The students were briefed that they were to watch the first advertising portrayal, then fill out the three pages in that section then wait for the others to catch-up.
- 6) The above process was repeated until all three advertisements had been viewed and evaluated. In summary, each class of students viewed and then evaluated the three *gender-relevant versions* of the animatic, these being: 1) the positive execution; 2) the punishment execution and; 3) the combination execution.

Note: The stimulus video was rotated in order that the three portrayals would appear in different order throughout the study. This was done to try and stop order-of-presentation bias.

- 7) Students waited until everyone in the class had finished the final advertisement portrayal evaluation and were then asked to complete the last ‘green section’ of the study. At this point attention was drawn to question twenty. This question asked for information about the alcohol consumption. Before answering respondents were asked to refer to the “What is a Standard Drink?” handout.
- 8) Once the questionnaire was finished either the teacher or a student collected the questionnaires and the students were given a chocolate and thanked for their efforts.

4.3 Summary

This chapter has explained the methodology of this study. The upcoming chapter presents the findings from this study to shed light on the hypotheses that are of specific interest to this study. To this end, chapter five will discuss the results and draw conclusions regarding these hypotheses. Additional discussion will also take place regarding other more general results that were generated from the study that are thought to be of extra interest.

Chapter 5 - Preliminary Data Analysis and Hypothesis Testing of the Three Advertising Appeals

5.0 Introduction

Of the approximately 750 questionnaires returned, 712 were deemed to be useable. This sample size result exceeded the original expectations of the study. Because the response to the study was better than expected, the final day of data collection was cancelled.

At the outset of the study, there were a number of key concerns that might have prevented the researcher from getting the necessary sample. These concerns included: that there would be problems getting into the schools and getting enough schools to participate; that the schools might lack enthusiasm toward the study or perhaps the teachers and students may have an underlying level of antagonism towards the study. These concerns however, were not realised. The students were generally found to be very approachable and they were genuine in their attempts to participate in the study.

5.1 Data Analysis

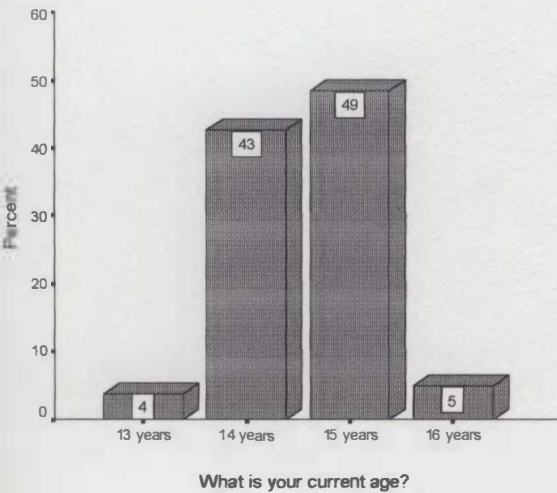
The data analysis and reporting in this thesis is broken into two chapters. In this chapter the analysis and reporting focuses on a general overview of the attitudes and experiences of the adolescent respondents toward alcohol and its use. Where possible, these findings will be briefly compared to other published findings by Australian health researchers and authorities. For example, the *Developmental Research for a National Alcohol Campaign* guide, published by Shanahan, et al. and

the Commonwealth Government’s *1998 National Household Drug Strategy*. The hypotheses in this study will also be addressed in this chapter. Chapter Six will include analysis of the data relevant to the research objectives and a discussion section will ensue.

5.2 Initial Sample Distributions

It was anticipated that this study would have a good representation of both male and female, year 9 and 10 students from a number of metropolitan schools. This broad representation was achieved. Following is a summary profiling the general characteristics of the respondents who participated in this study

5.2.1 Age Distribution



What is your current age?			
		Frequency	Valid Percent
Valid	13 years	27	3.8
	14 years	303	42.7
	15 years	344	48.5
	16 years	35	4.9
	Total	709	100.0
Missing	No response	3	
Total		712	

Figure 5.1 and Table 5.1: The age distribution within this sample of respondent

In line with the needs of the research design, the majority of the respondents, or just over 91 per cent, were between the ages of 14 – 15 years old. See Figure 5.1 and Table 5.1.

5.2.2 Gender Distribution and Year of Study

A pie chart in Figure 5.2 describes the gender breakdown in this study. The breakdown was as follows:

- The distribution of males to females was quite similar with slightly more males (53 per cent) than females (47 per cent)

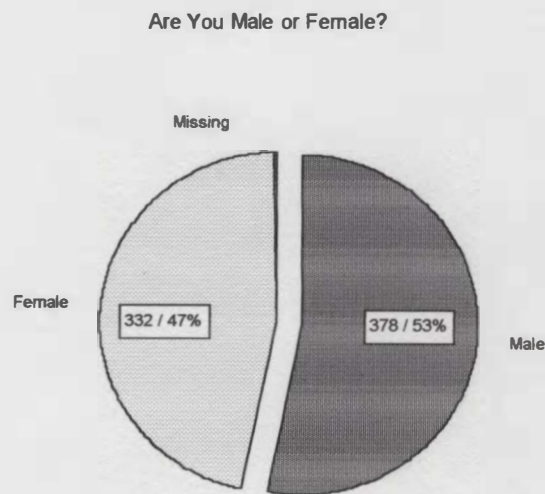


Figure 5.2: The gender distribution within the sample

In line with the general character of the Western Australia school population outlined in the methodology, this study generated what appeared to be a good balanced representation of both gender and year of study (see Table 5.2).

Table 5.2: *This table demonstrates the distribution of genders across year of study*

		Are You male or female?		
		Male	Female	Total
		N = 359	N = 328	%
	Year 9	25	22	47
	Year 10	27	26	53
Total	%	52	48	100

5.2.3 School Representation

The breakdown of schools did however show that some schools had a considerably higher representation in some groups than others (see Table 5.3). Each school ideally would have a 20 per cent representation within the data but this sample distribution was not achievable due to practical constraints placed on the data collection. The Chi-square analysis indicated that some schools were over represented ($X^2 = 134.66, df = 4, p.0.01$). Key observations in this data in Table 5.3 include:

- Subject school 5 had nearly 35 per cent of all respondents instead of a more preferred representation of 20 per cent

- Subject schools 2 and 3 collectively only comprised less than 22 per cent of the entire sample

Table 5.3: The 712 respondents across the five different schools

Representation of Schools	Observed %
	N = 712
School One	23
School Two	10
School Three	12
School Four	20
School Five	35

5.2.4 Respondents’ Attitudes and Experiences with Alcohol

The data has been processed to determine general attitudes and experiences of adolescents about alcohol use. Following are some observations that have been made from this data.

- 434 out of 704, or 61.4 per cent of adolescents reported that they felt *regular use of alcohol was O.K* (see Figure 5.3)
 - * Note: For the purpose of simplicity, the questionnaire did not give the adolescent respondents a definition of “regular use,” instead they commented on this adjective as they saw fit
- The majority of adolescents in this study (92.4 per cent) had drunk alcohol in the past (see Figure 5.4)

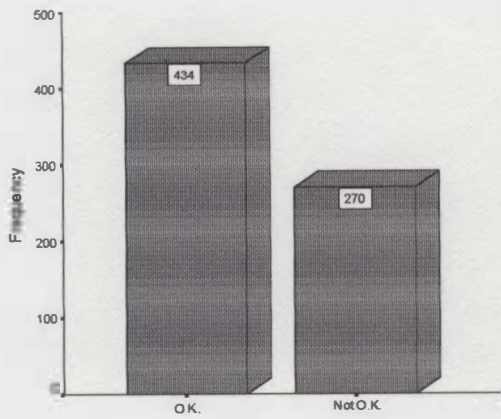


Figure 5.3: Adolescent attitudes to alcohol use

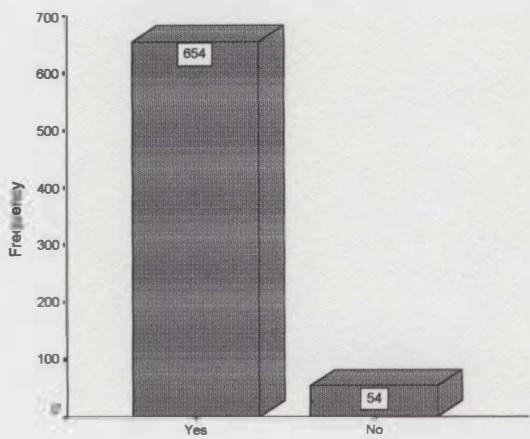


Figure 5.4: Adolescents who had previously drunk alcohol

A cross tabulation of male and female drinking behaviour was conducted to try to determine how they might differ (see Table 5.4). The data suggested that males and females were just as likely to indicate they drank alcohol in the past and this was supported by a Chi-square analysis suggesting there was no relationship between gender and whether the adolescent had drunk alcohol before ($\chi^2 = 0.005$, $df = 1$, $p=0.944$).

Table 5.4: Cross tabulation of the percentage of male to female drinkers and non-drinkers

			Are You male or female?	
			Male	Female
Have you ever drunk alcohol?			N = 377	N = 331
	Yes		92	92
	No		8	8
Total	Total	%	100	100

This study suggested that adolescents believed that by their age, this being 14 – 15, most people had tried alcohol. For example;

- Of the 707 respondents who responded to this question, only 11, or 1.6 per cent, indicated that they believed none of their friends had drank alcohol in the past (see Figure 5.5)
- Conversely, 82 per cent of respondents or 583 out of 707, indicated that half or more than half of their friends had drank alcohol

When interpreting the output in Table 5.4 and Figure 5.5 consideration should be given to adolescent reporting of their past alcohol use. The data may be misleading because it did not discriminate as to whether the respondents’ experiences, or that of their friends, had been in the home with the family where permission and approval was given or away from the family without their permission or approval. Therefore, perhaps a more telling piece of data as to the amount of unsanctioned adolescent alcohol use that occurs can be viewed in Figure 5.6. This bar chart clearly indicates that the adolescents surveyed in this study have in the majority of the cases, drunk alcohol without their parent knowing, for example:

- 73 per cent of adolescents in this sample, or 515 out of 707, said that they had drunk alcohol without their parents knowing
- 27 per cent of adolescents in this sample, or 192 out of 707, said that they had not drunk alcohol without their parents knowing

A Chi-square test indicated that gender was not linked to whether adolescents had drunk without their parents’ knowledge ($\chi^2 = 0.001$, $df = 1$, $p = 0.985$)

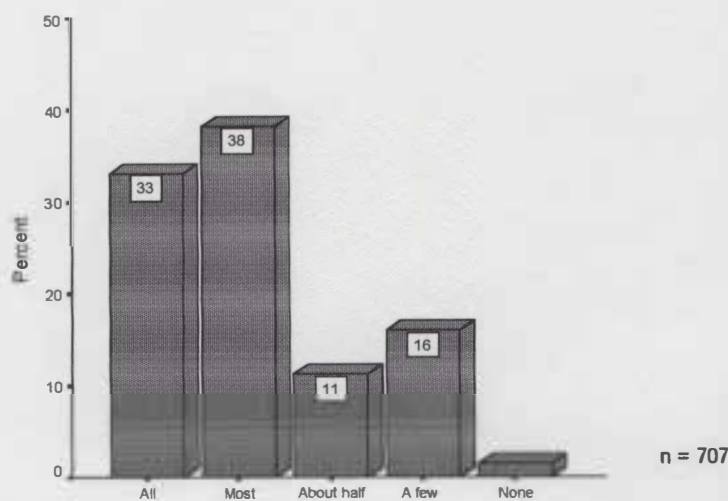


Figure 5.5: *Adolescents estimated the proportion of their friends who drank alcohol*

Adolescent respondents were also asked to indicate what age they were when they first drank alcohol without their parents knowing. This data needed attention because it became apparent that there were a number of outliers in the data that had not been treated during the data cleaning process. For example, four respondents said they were either 1, 4, 7 or 8 years-old when they drank alcohol without their parent’s permission. The data was subsequently re-checked and only responses that

indicated the respondent was 10 or more were kept for analysis in this study. These younger ‘outliers’ were removed from the study because they were considered unrepresentative for a number of reasons. For example, they may not have been taking the research seriously, or perhaps they misunderstood the question in some way, or maybe their reported life experience was just very atypical.

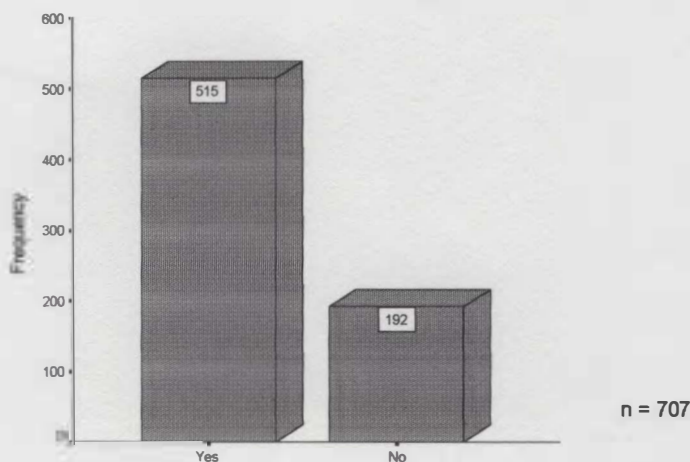


Figure 5.6: *Adolescents who had previously drunk alcohol without their parents knowing*

The bar chart in Figure 5.7 demonstrates the age distribution of those when they first drank alcohol without their parents knowing.

- The data indicated that 64 per cent of respondents or 311 out of 489, indicated they had drunk alcohol without their parents’ knowledge between the ages of 13 and 14.

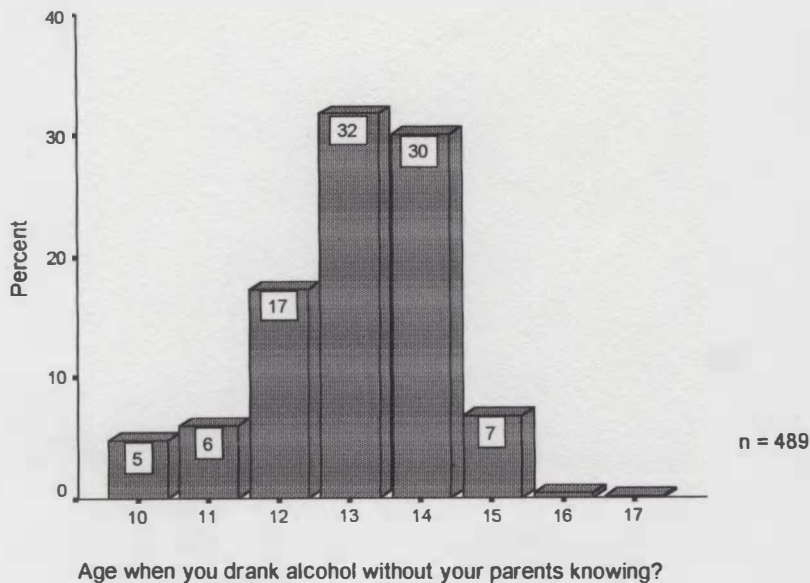


Figure 5.7: *The ages of those who drank alcohol without their parents' knowledge*

The discussion in chapter 2 highlighted the perceived importance of parents being pro-active in monitoring their children’s activities where alcohol and other drugs are concerned (Steinberg et al., 1994; Windle, 1996; Jackson et al., 1999) and to set a positive example by their own use of alcohol (Goleman, 1995; Boyd, 1995; Williams & Perry, 1998). This aside, Shanahan and Hewitt (1999) identified a trend to suggest Australian parents often felt alienated, isolated and powerless in their role as *gate keepers* for their children. The data presented in this section may support those concerns suggesting many parents may be losing the battle in stopping their children from drinking alcohol without their knowledge.

Looking at the differences in alcohol consumption across gender the data has indicated that: 1) females were just as likely as males to have drunk alcohol in the past; 2) females are just as likely as males to have concealed their drinking from their parents. These findings are in line with previous findings of Shanahan and Hewitt (1999), who reported that the gap between male and female attitudes and

behaviours in regard to drinking alcohol has lessened in recent years. Some of the data output to follow will look at gender differences to identify any attitudinal or behavioural differences between genders.

5.2.5 Frequency that Adolescents Drink

Adolescents were asked how regularly they drink alcohol. Of the 689 respondents who answered this question, 118 or 17 per cent indicated they “*don’t currently drink*”. With 118 indicating that they were non-drinkers, this left 571 who reported that they did drink to some degree. To further assist in the interpretation of the data those 34 per cent of respondents who reported they “*don’t currently drink*”, “*drank once or twice per year*”, “*I drink less often than once or twice per year*” were collapsed into one group called *non-drinkers*. This was done because the drinking in these groups was considered to be so infrequent that a decision rule was made for practical reasons to acknowledge this group as “non-drinkers.” It might also be argued that 14 – 15 year-olds who indicate they drink once or twice per year, or less than twice per year are just trying project themselves as being more mature with the rest of their peers, being ‘cooler’ by indicating they are a drinker ‘of sorts.’

The data output in Table 5.5 indicated the following:

- Of those respondents who indicated that they do drink alcohol, 20 per cent, or 138 out of 389 do so at least once per week or in some cases more. This finding differs somewhat from that of Shanahan and Hewitt (1999) who found approximately 30 percent of 15-17 year-olds had drunk alcohol in the last seven days. The higher reported incidence of drinking by adolescents in the Shanahan and Hewitt study can probably be attributed to a sample that contained older subjects. Research by the Health Department of Western Australia indicated that as a general rule, throughout adolescence alcohol

consumption increases as a function of increasing age with older adolescents drinking more than younger adolescents (Health Promotion Services, 1998a).

Table 5.5: Frequency with which respondents drank alcohol

If you said you <i>have</i> drunk alcohol in the past then how would you describe the way you drank alcohol?		
		N = 689
Non-drinkers		34
Drink every day		1
Drink once a week or more		19
Drink about once a month		27
Drink every few months		19
Total	%	100

- 47 per cent of the adolescent respondents in this study, or 326 out of 689, indicated they drank alcohol at least once per month

A split-gender bar chart and cross tabulation was produced to see whether there were any substantial gender differences between males and females where frequency of alcohol consumption was of interest (see Figure 5.8).

The data output mirrored earlier findings of Shanahan and Hewitt (1999) that found that the frequency with which males and females drank alcohol was very similar with the exception being where an adolescent reports they drink *once or twice a year*. In this case males were far more likely to report consuming at this level than females (Shanahan & Hewitt, 1999). The Chi-square indicated that there

was no significant relationship between gender and an adolescent's drinking practices ($\chi^2 = 4.92, df = 6, p = 0.554$).

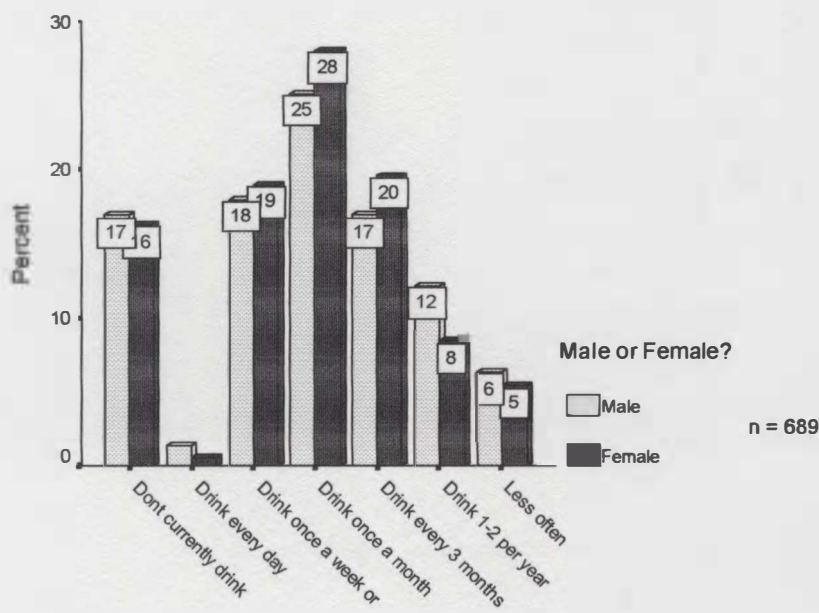


Figure 5.8: Gender differences in alcohol drinking frequencies

5.2.6 Usual Alcohol Intake on Each Occasion

Respondents were asked how much they *usually* drink on each drinking occasion. The findings were as follows:

- Of the 674 respondents who answered this question, 542 indicated they drank alcohol. 35 per cent of these 542 respondents indicated they usually drink 1 – 2 standard drinks on each occasion. This compares with 27 per cent of 14-19 year olds reporting they usually drink 1-2 standard drinks in the 1998, National Drug Household Survey (2000).

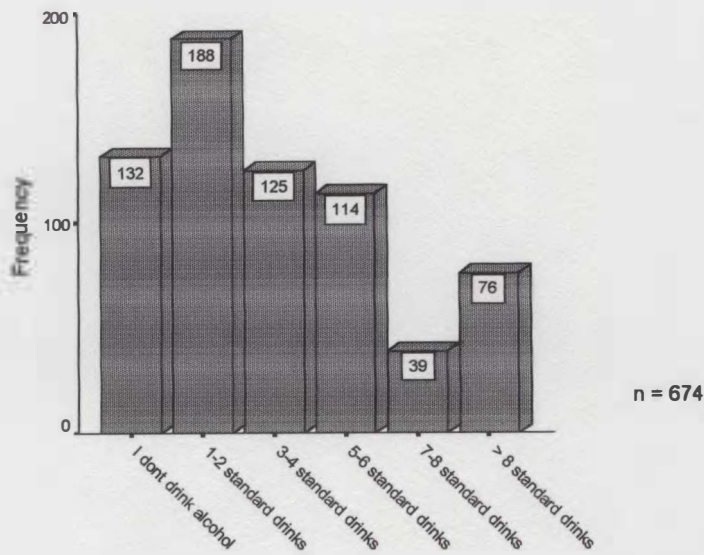


Figure 5.9: The amount adolescents self-report usually drinking on each occasion

- Of 542 respondents who said they do drink alcohol 42 per cent reported that they usually drink 5 –6 *standard drinks or more* on each occasion. This represents an “unsafe” intake level according to the National Health and Medical Research Council. This compares with the 50 per cent of 14-19 year olds reporting in the 1998 National Drug Household Study that they usually drink 5 - 6 *standard drinks or more* on each occasion (2000).
- Of the 542 respondents who said they do drink alcohol 14 per cent reported they usually drink *more than 8 standard drinks on each occasion*. This figure compares with 30 per cent of 14-19 year olds reporting they usually drink 7 *drinks or more* in the 1998 National Drug Household Survey (2000).

This data suggests that drinking amongst adolescents in this sample is often done at what the National Health and Medical Council would describe as *unsafe* or *hazardous* levels suggesting that the restraint message has not influenced the

behaviour of perhaps as many as 40 – 45 per cent of the 14-15 year-old school students in Perth.

To try and understand whether males or females have different levels of alcohol consumption it is helpful to run a split-gender bar chart and a cross tabulation (see Figure 5.10 and Table 5.6). The findings in this data output were as follows:

- It was found that *of those who did report drinking alcohol* 63 per cent of girls and 68 per cent of boys drank *3 or more standard drinks on their last occasion*.

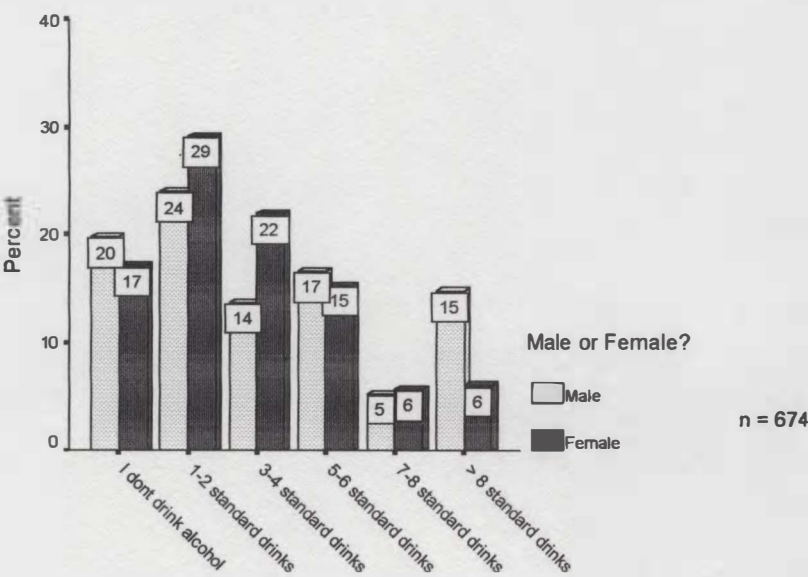


Figure 5.10: A split gender bar self-reporting of alcohol consumption.

This differs somewhat from the earlier findings of Shanahan and Hewitt (1999) who reported that 66 per cent of female subjects drank *3 or more standard drinks on their last drinking occasion*, compared with 57 per cent of boys (Shanahan & Hewitt, 1999). As has been previously mentioned the Shanahan and Hewitt (1999) study did include amongst its sample an older group of adolescents which

might account for this difference (see Table 5.6). A Chi-square analysis indicated that there was no significant relationship between an adolescent's age and their drinking practices ($\chi^2 = 7.38$, $df = 5$, $p = 0.194$).

Some of the observations from the table and cross tabulation from Table 5.6 are as follows:

- *Of those that describe themselves as drinkers* the data suggested that more female than male respondents describe themselves as usually drinking *1-2 standard drinks*, with 37 per cent or 97 out of 260 females self-reporting that they drink this amount. Conversely 32 per cent of males or 91 out of 282 self-reported that they drink *1-2 standard drinks*.
- At the consumption level of *5-6 standard drinks* the genders were very close in their self-reported behaviours. 22 per cent, or 63 out of 282 of male respondents self-reported that they usually drinking *5-6 standard drinks* whereas 20 percent, or 51 out of 260 female respondents self-reported that they drink at this level.
- Similarly, where respondents describe themselves as usually drinking *7-8 standard drinks*, 7 per cent of both male and female respondents self reported that they drink at this level.
- There was however, quite a considerable difference between the genders of those who describe themselves as usually drinking *more than 8 standard drinks* with males much more likely to report drinking at this level. 20 per cent, or 56 out of 282 respondents indicating they drink at this level compared with 8 per cent, or 2 out of 260 of the females.

Table 5.6: Consumption levels of males and females on each drinking occasion

		Male	Female
If you said you drink alcohol,		N = 282	N = 262
how much do you usually drink?	1 – 2 standard drinks	32	37
	3 – 4 standard drinks	18	28
	5 – 6 standard drinks	22	20
	7 – 8 standard drinks	7	7
	More than 8 drinks	20	8
Total	%	100	100

Although boys appeared to drink more on each drinking occasion, boys were also more likely to indicate that they *don't drink* alcohol at all. Twenty one per cent of boys reported they do not drink alcohol at all compared with 18 per cent of girls (see Figure 5.10). The data in this study indicated that there are differences in alcohol consumption depending on gender ($\chi^2 = 21.20$, $df = 4$, $p = 0.01$) (see also Table 5.6).

5.2.7 Respondent's Reasoning for Reducing Alcohol Consumption

Those respondents who indicated they drank alcohol were asked to respond to the following question: *if you had in the past tried to reduce your drinking, what were your reasons?* Only those adolescents who had: 1) drunk alcohol in the past and; 2) reported they had tried to reduce their drinking should have responded to this question. Table 5.7 shows a breakdown of some of the reasons respondents said they had tried to reduce their alcohol consumption.

Table 5.7: *Self-reported reasons why some of the respondents in the sample chose to reduce their alcohol intake.*

Reason		Percent
		N = 420
Reasons why I tried to reduce my drinking...	For health reasons	18
	For lifestyle reasons (study/Work, other commitments)	18
	Social reasons (e.g., avoid violence, losing control, being a pain)	20
	Because of taste / enjoyment (e.g., prefer low alcohol, don't like the feeling of being drunk)	17
	A waste of money	20
	Other reasons	7
Total Count		100

There were 1049 responses by 420 respondents to the question. Some respondents indicated more than one of the above factors was an important consideration in their decision to reduce their alcohol consumption. A brief summary of the data in Table 5.7 is as follows:

- This data suggested there was no one dominant reason why respondents are choosing to reduce their alcohol consumption
- The number one reasons why respondents indicated they chose to reduce consumption was because of '*social reasons*' and they thought alcohol was '*a waste of money*'

This question returned data that was very much in line with the earlier findings of the HDWA Adolescent Perceptions, Beliefs and Attitudes Towards Alcohol Consumption Study (Health Promotion Services, 1996b) and other research

by Shanahan and Hewitt (1999). For example, social reasons such as fighting, unprotected sex, being taken advantage of, ending up out of control, *were all* major areas of concern cited by adolescents in this previous study. These authors suggested health reasons were not influential in getting adolescents to drink less alcohol. The current study however did not totally support these previous findings with 18 per cent of respondents indicating a concern for their health was an influential factor in reducing their drinking.

Question: *In your opinion, do you think there are more good things than bad things when considering drinking alcohol?*

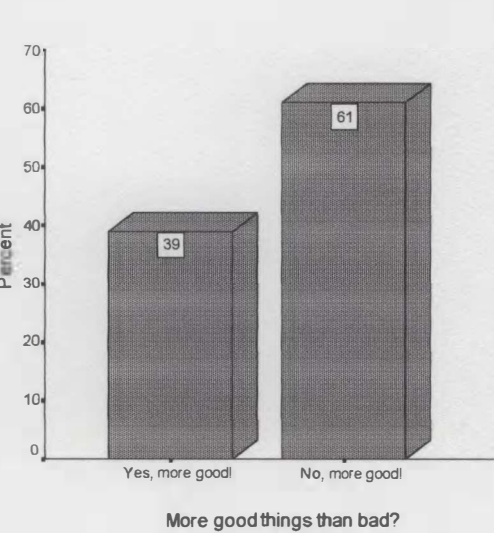


Figure 5.11: Respondents' attitudes toward the use of alcohol

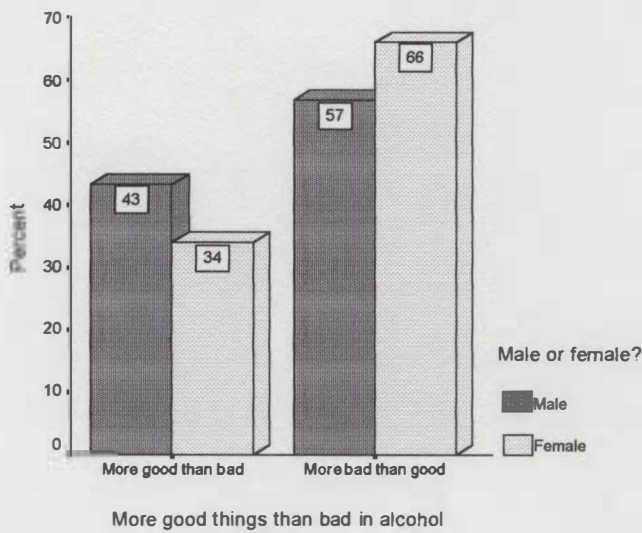


Figure 5.12: The breakdown of male to female – attitudes towards the use of alcohol, the product

Respondents were asked in a general sort of way whether on balance, alcohol was a positive or negative consumer product. Sixty one per cent of respondents indicated that they believed there was more *bad* than *good* in alcohol. This finding was very similar to results in the 1994 study by the HDWA that found 55 per cent of

respondents believed there was more *bad* in alcohol than *good* (see Figure 5.11). In contrast to these findings, Shanahan and Hewitt's (1999) research concluded that "*adolescents believed the benefits of alcohol use by far outweighed its disadvantages*" (p.10). Care does however need to be taken with this particular piece of data output. For example, on the questionnaire this question proved confusing to respondents and as a consequence, they may have produced misrepresentative data. Demonstrating this, adolescents reported that they drink alcohol, drank regularly, and drank to excess yet the output in Figures 5.11 and 5.11 contradicted these previously reported attitudes and behaviours by adolescents.

Perhaps in supporting these results though, the literature review in Chapter Three did identify studies where their authors had identified similar contradictions in their findings for example, recapping on those findings below:

- Adolescents believe the worst thing about drinking alcohol is *losing control* and adolescents are for the most part, aware of the myriad of negative outcomes that can arise as a result of losing control.
- Adolescents in Australia report that when they are drinking alcohol they do so with an intention or expectation to get drunk, and quickly, on most drinking occasions. In other words, they drink to get *out of control*.

(Health Promotion Services, 1996(b); Shanahan & Hewitt, 1999)

The data did however support the earlier findings of Shanahan and Hewitt (1999) that found evidence to suggest that females are somewhat more mindful of the negative by-products of drinking alcohol than were their male counterparts. This finding is in spite of their reported behaviours that indicate that their consumption levels are higher by some measures than males (see Figure 5.10). Females were more likely to see the negative in alcohol than were males, with 66 percent of females reporting agreement *that there was more bad than good in alcohol*

compared with males 57 per cent of male respondents who agreed with this statement. To provide extra evidence of a likely relationship between *gender and attitude toward alcohol being more good or bad* a Chi-square statistic has been computed. This test has suggested a relationship does exist between gender and attitudes toward alcohol ($\chi^2 = 6.153$, $df = 1$, $p = .008$).

This section attempted to give the reader an overview of the characteristics of the respondents who participating in this study. With this process completed the time has now come to address the hypotheses of this study. To this end, the data from the study shall now be presented to assess how the three different advertising execution styles performed in this study.

5.3 Introduction – Hypothesis Testing of the Three Binge Drinking Advertising Execution

The analysis of the data directly pertinent to the hypotheses of this study are presented and discussed in this chapter. To successfully undertake the data analysis section of the thesis it is important that the appropriate tests are selected because an incorrect test can lead to incorrect conclusions. The data that was collected for this hypothesis testing was ordinal in nature therefore nonparametric testing techniques are to be used. The non-parametric tests that were subsequently chosen were the *Friedman test* and *Wilcoxon Matched-Pairs Signed Rank Test*.

5.4 Statistical Tests

5.4.1 The Friedman Test

Initially a Friedman test was conducted and where significant difference between the findings was evident, a follow-up Wilcoxon test was conducted to identify more accurately where the differences lay. The Friedman test is a nonparametric test that can compute observations repeated on the same subjects. However, the difference between the Wilcoxon and Friedman tests lie in their application. The Friedman test is a nonparametric test that compares three or more paired groups, rather than just the two paired groups as is the case with the Wilcoxon test (online, 2002, www.graphpad.com/articles/interpret/ANOVA/friedmans.html). This Friedman test is an alternative to the repeated measures ANOVA, in cases such as this where the assumptions of normality or equality of variance are not met.

Friedman tests the null hypothesis that k related variables come from the same population. For each case, the k variables are ranked from 1 to k . The test statistic is based on these ranks (SPSS, 2001, Help Tutorial). Like the Wilcoxon test,

the Friedman test uses the ranks of the data rather than the raw values to calculate the statistic (online, 2002, www.texasoft.com/winkfrie.html). The test statistic for the Friedman's test is a Chi-square with $n-1$ degrees of freedom, where n is the number of repeated measures. When the p-value for this test is small (usually < 0.05) you have evidence to reject the null hypothesis. The Friedman test is therefore, used to analyse differences in observations in data where the three advertising stimuli are applied to the same sample population. This test is able to determine whether a significant difference exists between the two advertising treatments.

5.4.2 The Wilcoxon Test

The Wilcoxon test was chosen because it is a relatively powerful test that is sometimes used in place of the t test for correlating groups when an extreme violation of normality exists, or as is the case with this data, where the data are not appropriately scaled. The Wilcoxon signed ranks test considers both the magnitude of the differences of scores and their direction. This test is however less powerful than the t test for correlated groups because the t test can test the *actual* magnitude of a score rather than just testing the *ranking* of a score (Pagano, 1983).

The Wilcoxon test was used in this thesis to analyse differences in the data where *two types* of advertising stimuli are tested on the same sample population. This test was able to determine whether any significant differences exist between the two advertising treatments.

5.4.3 Bonferroni Adjustment

When performing multiple statistical significance tests on the same data as is the case here, the Bonferroni adjustment can be applied to make it more "difficult" for any one test to be statistically significant. For example, when reviewing multiple correlation coefficients from a correlation matrix, accepting and interpreting the

correlations that are statistically significant at the conventional .05 level may be inappropriate, given that multiple tests are performed. Specifically, the alpha error probability of erroneously accepting the observed correlation coefficient as not-equal-to-zero when in fact (in the population) it is equal to zero may be much larger than .05 in this case (online, 2002, www.statsoft.com/textbook/glosfra.html).

The Bonferroni adjustment required the alpha level (0.01 in this study) to be divided by the number of tests being performed. In this case the calculation was as follows $0.01/3 = 0.0033$. Therefore, for this study, any test that results in a *p*-value of less than 0.0033 would be considered statistically significant; correlations with a probability value greater than 0.0033 (including those with *p*-values between 0.0033 and 0.01) would be considered non-significant. The Bonferroni test was used here as a post-hoc test that determined the significant differences between the group means in this analysis of variance setting. The Bonferroni test is said to be very conservative when a large number of group means are being compared (online, 2002, www.statsoft.com/textbook/glosfra.html).

5.4.4 Descriptive Statistics

Prior to conducting tests for statistical significance, descriptive statistics were generated to get a general understanding on how the data was distributed. Similarly, where the Friedman and Wilcoxon tests reported a significant difference between the responses to the different advertising stimuli, descriptive analyses were used to try and indicate the size and direction of significant differences. The four methods found most useful for this process in this study were to generate the *median*, *mode*, *mean rank* and *bar charts*.

Brace, Kemp and Snelgar (2000) suggested the most appropriate descriptive statistics to work with when using non-parametric data are the median and range. The median is a measure of central tendency that expresses the value where one-half of the values are greater than the median and the other half is less than the median.

The range is “a measure of dispersion that identifies the distance between the lower value or minimum value, and the highest value, or the maximum, in an ordered set of values” (Burns & Bush, 1998, p.461). Bar charts were used to describe the size, direction and normality of the distributions. Where the difference is significant but small to the point where the direction of the difference is unclear by viewing output such as the median, mode or visuals such as the bar chart, the mean ranking statistic was used to determine the size and direction of that difference.

To follow is a summary of the presentation format. This presentation format is used to clearly and methodically process and display the results of the hypothesis testing for the three advertising execution styles. The presentation will therefore take the following approach:

- 1) The hypotheses will be clearly stated
- 2) The relevant questionnaire questions are stated
- 3) After preliminary descriptive analysis, the Friedman test is conducted
- 4) Where necessary the Wilcoxon matched-pairs test is conducted
- 5) The hypothesis is accepted or rejected

More details on the procedure can be viewed in Table 5.8.

Table 5.8: *This table shows the three hypotheses to be tested in this chapter, the questionnaire questions to be used for this testing and the test procedure*

Hypotheses	Questionnaire Questions	Test Procedure
Hypothesis One – A_{ad}		
A combination advertising execution style will be more effective in producing positive attitudes in adolescents towards the advertisement ($+A_{ad}$) than both the punishment and positive advertising execution style	7ap, 7bp, 7gp 9an, 9bn, 9gn 11ac, 11bc, 11gc	Friedman test Median, mode, mean rank, bar charts
Hypothesis Two – A_c		
A combination advertising execution style will be more effective in producing a positive attitudes in adolescents toward the cause ($+A_c$) of reducing adolescent binge drinking than both the punishment and positive advertising execution style	7hp, 7ip, 7jp, 7kp 9hn, 9in, 9jn, 9kn 11ac, 11bc, 11cc, 11gc	Friedman test median, mode, mean rank, bar charts
Hypothesis Three – A_{act}		
A combination advertising execution style will be more effective in producing a greater intention to use restraint when consuming alcohol or refrain from using alcohol altogether ($+A_{act}$) than both the punishment and positive advertising execution style	8ap, 8bp, 8cp 10an 10bn, 10cn 12ac, 12bc, 12cc	Friedman test median, mode, mean rank, bar charts

5.5 Hypothesis One

The combination advertising execution style will be more effective in producing positive attitudes in adolescents towards the advertisement (+A_{ad}) than both the punishment and the positive advertising execution style

- Independent Variables:**
- Combination advertising execution
 - Punishment advertising execution
 - Positive advertising execution

- Dependent Variable:**
- Attitude to the advertisement (A_{ad}).

The three A_{ad} questionnaire questions that were clustered together to produce the measurement for the A_{ad} construct were as follows:

- I feel that this ad on TV would probably catch my attention
- I feel that this ad on TV would be important to me
- I liked this ad idea

Prior to doing any analysis of the A_{ad} construct an analysis of the individual questions that comprise the construct was undertaken to get some understanding of how the advertising executions were received by the adolescent respondents (see Table 5.9). This process demonstrated a pattern in the data that suggested that the positive advertising execution style was *significantly* less effective than the other two advertising executions at a level of $p < 0.01$. The mean ranking in the data also suggested that in two out of three cases, the combination advertising execution style was marginally better than the punishment execution style; in the third case the punishment execution style was better than the combination execution style. These

differences between the combination and punishment execution styles were however, not statistically significant.

Table 5.9: A summary of the output for each of the questions that comprise the construct A_{ad}

Attitude to the Advertisement – Questionnaire Questions					
Friedman Test 1	Execution Style	Mean Rank ^a	Chi-square	P-value	
I feel that this ad on TV would probably catch my attention	Positive execution	1.80	79.853	$p < 0.01$	
	Punishment execution	2.11		df = 2	
	Combination execution	2.09		n = 704	
Wilcoxon Test 1	Execution Comparisons	Z = value	Ties	P = value	Signif
	Positive / Combination	7.750	359	$p < 0.01$ ^b	✓
	Punishment / Positive	7.283	385	$p < 0.01$ ^b	✓
	Combination / Punishment	0.81	297	$p > 0.936$	✗
Friedman Test 2	Execution Style	Mean Rank	Chi-square	P-value	
I feel that this TV ad would be important to me	Positive execution	1.91	18.989	$P < 0.01$	
	Punishment execution	2.02		df = 2	
	Combination execution	2.07		N = 700	
Wilcoxon Test 2	Execution Comparisons	Z = value	Ties	P = value	Signif
	Positive / Combination	4.935	328	$p < 0.01$ ^b	✓
	Punishment / Positive	3.762	364	$p < 0.01$ ^b	✓
	Combination / Punishment	0.950	322	$p > 0.342$	✗

Friedman Test 3	Execution Style	Mean Rank	Chi-square	P-value	
I liked this ad idea	Positive execution	1.85	42.668	P < 0.01	
	Punishment execution	2.03		df = 2	
	Combination execution	2.12			
					n = 693
Wilcoxon Test 3	Execution Comparisons	Z = value	Ties	P = value	Signif
	Positive / Combination	6.006	393	p < 0.01 ^b	✓
	Punishment / Positive	4.258	387	p < 0.01 ^b	✓
	Combination / Punishment	1.89	359	p > 0.059	✗
* Shaded section signifies the highest ranking for that particular advertising execution style					
^a = All mean ranking scores are the ranked averages of the aggregate scores of the three combined attitude to the cause questions					
^b = Alpha level set at for significance at 0.01/3 = 0.0033 due to Bonferroni adjustment					

Once this data had been analysed and the output viewed it was concluded that there was a pattern of response emerging in the data and that there were no anomalies or extreme values in the results that would suggest any problems might arise if these questions were clustered to comprise the A_{ad} constructs. This test was helpful because it gave an assurance the data in each of the A_{ad} constructs was likely to be representative of a broader overall trend.

After validating the individual questions, the data from these three questions were combined to create the *attitude to the advertisement* construct for the three execution styles (*combination, punishment and positive advertising execution styles*). The construct was then tested using the Friedman test to determine if any differences exist between the three different advertising executions that might then suggest that

one execution style works better than the other. Output from this Friedman test is provided in Table 5.10.

Table 5.10: A summary of the output generated using the Friedman and Wilcoxon test to determine the A_{ad}

Attitude to the Advertisement				
Friedman Test 4				
Execution Style	Mean Rank ^a	Chi-square	P-value	
Positive execution	1.71	61.418	$p < 0.01$	
Punishment execution	2.07			
Combination execution	2.14			
N = 686				
Wilcoxon Test 4				
Execution Comparisons	Z = value	Ties	P = value	Significant
Positive / Combination	7.739	520	0.01 ^b	✓
Punishment / Positive	6.334	529	0.01 ^b	✓
Combination / Punishment	1.230	500	0.219	✗
^a = All mean ranking scores are the ranked averages of the aggregate scores of the three combined attitude to the advertisement questions				
^b = Alpha level set at for significance at 0.01/3 = 0.0033 due to Bonferroni adjustment				

The statistics in Table 5.10 indicate that adolescents felt there was a significant difference in the way the three advertising execution styles worked ($\chi^2 = 61.418$, $df = 2$, $p = 0.01$). The mean ranks in Table 5.10 are now used to get an initial indication as to the magnitude of the scores and their direction. A quick inspection of the statistics suggests the following:

- The combination advertising execution style (2.14) ranks slightly higher than the punishment execution style (2.07) and somewhat higher by the adolescent respondents than positive execution style (1.71)
- The significant difference reported by the Friedman test appears to lay in the difference between the positive execution style and the other two advertising execution styles

To determine where the statistical significance lay between the variables, a Wilcoxon tests was then run. This test was used to determine whether there was a statistically significant difference between the combination execution style and the punishment execution style (see the Wilcoxon output in Table 5.10). The findings were as follows:

- Both the combination and the punishment advertising executions were rated significantly highly than the positive executions style at a level of $p < 0.01$
- While the combination advertising execution style did have a higher mean ranking score than the punishment advertising execution style this figure was not found to be statistically significantly ($p > 0.219$)

Conclusion - Hypothesis One

Because the combination advertising execution did rate better (2.14) than the positive0 execution style (1.71) at a level of statistical significance ($p < 0.01$) there was partial support for the hypothesis. There was however, no statistically significant difference between the way adolescents' rated the combination advertising execution style and the punishment advertising execution despite having a mean ranking of 2.14 and 2.07 respectively. Hypothesis one is therefore, rejected.

5.6 Hypothesis Two

The combination advertising execution style will be more effective in producing positive attitudes in adolescents toward the cause (+A_C) of reducing adolescent binge drinking than both the punishment and the positive advertising execution style

- Independent Variables:**
- Combination advertising execution
 - Punishment advertising execution
 - Positive advertising execution

- Dependent Variable:**
- Attitude to the cause (A_C)

The four questionnaire questions that were clustered together to produce the measurement for the A_C were as follows:

- This ad makes me feel that ads trying to stop people my age getting drunk are important
- I feel that this ad on TV would tend to make a good point
- I think I would support this ad idea
- I would support health promotions if they were like this ad

Again, prior to doing any analysis of the (A_C) construct, an analysis of the individual questions that comprise the construct was undertaken (see Table 5.11). As was the case with Hypothesis One, this process demonstrated a pattern in the data that would suggest that the positive advertising execution style was *significantly* less effective than the other two advertising executions at a level of $p < 0.01$. The mean ranking in the data also suggested that in two out of four cases, the combination advertising execution style was marginally better than the punishment execution

style. Conversely, the other two other questions indicated that the punishment execution style was rated as being marginally better than the combination execution style. These differences between the combination and the punishment advertising execution styles were however, not statistically significant in any of the four sets of data.

Where the question “*this ad makes me feel that ads trying to stop people my age getting drunk are important*” was asked, the punishment advertising execution style was initially thought to be significantly better than both the positive and combination advertising execution styles at a level of $p = 0.01$. A post hoc Bonferroni test did however conclude that the required alpha level was too large at $p > 0.0033$ ($p = 0.01/3 = 0.0033$).

At the conclusion of this process, the data indicated that there was a pattern of response emerging that suggested both the punishment and combination advertising execution styles appear to have a similar impact on respondents whereas the positive approach appears less effective. Importantly, this test seemed to indicate there were no anomalies or extreme values in the results that would suggest any problems might arise if these questions were clustered to comprise the A_c constructs. As was the case with hypothesis one, this test gave some assurance that the data in each of the A_c constructs was likely to be representative in its ability to suggest the likely trend in the test that will be conducted on the overall A_c construct.

After validating the individual questions the data from these four questions was combined to create the *attitude to the cause* construct for the three execution styles (*combination, punishment and positive advertising execution styles*). The construct was then tested using the Friedman test to determine if any differences exist between the three different advertising executions that might then suggest that one execution style works better than the other. Output from this test can be viewed in Table 5.11.

Table 5.11: A Friedman and Wilcoxon test summary of the output for each of the questions that comprise the construct A_c

Attitude to the Cause – Questionnaire Questions					
Friedman Test 1	Execution Style	Mean Rank ^a	Chi-square	P-value	
This ad makes me feel that ads trying to stop people my age getting drunk are important	Positive execution	1.87	41.189	$p < 0.001$	
	Punishment execution	2.12			
	Combination execution	2.01			
n = 70					
Wilcoxon Test 1	Execution Comparisons	Z = value	Ties	P = value	Signif
	Positive / Combination	4.313	472	$p < 0.01^b$	✓
	Punishment / Positive	5.844	364	$p < 0.01^b$	✓
	Combination / Punishment	2.580	330	$p > 0.01$	✗
Friedman Test 2	Execution Style	Mean Rank	Chi-square	P-value	
I feel that this ad on TV would tend to make a good point	Positive execution	1.83	57.041	$p < 0.001$	
	Punishment execution	2.09		df = 2	
	Combination execution	2.07			
n = 693					
Wilcoxon Test 2	Execution Comparisons	Z = value	Ties	P = value	Signif
	Positive / Combination	6.347	337	$p < 0.01^b$	✓
	Punishment / Positive	6.496	340	$p < 0.01^b$	✓
	Combination / Punishment	0.499	296	$p > 0.618$	✗

Friedman Test 3	Execution Style	Mean Rank	Chi-square	P-value
I think I would support this ad idea	Positive execution	1.86	43.553	$P < 0.001$
	Punishment execution	2.06		df = 2
	Combination execution	2.09		
n = 693				

Wilcoxon Test 3	Execution Comparisons	Z = value	Ties	P = value	Signif
	Positive / Combination	5.510	328	$p < 0.01^b$	✓
	Punishment / Positive	4.622	342	$p < 0.01^b$	✓
	Combination / Punishment	0.787	318	$p > 0.0431$	✗

Friedman Test 4	Execution Style	Mean Rank	Chi-square	P-value
I would support health promotions if they were like this ad	Positive execution	1.91	18.996	$p < 0.001$
	Punishment execution	2.03		df = 2
	Combination execution	2.06		
n = 701				

Wilcoxon Test 4	Execution Comparisons	Z = value	Ties	P = value	Signif
	Positive / Combination	3.888	341	$p < 0.01^b$	✓
	Punishment / Positive	3.305	354	$p < 0.01^b$	✓
	Combination / Punishment	0.762	313	$p > 0.446$	✗

* Shaded section signifies the highest ranking for that particular advertising execution style

^a = All mean ranking scores are the ranked averages of the aggregate scores of the three combined attitude to the cause questions

^b = Alpha level set at for significance at $0.01/3 = 0.0033$ due to Bonferroni adjustment

The statistics in Table 5.11 indicate that adolescents felt there was a significant difference in the way the advertising execution styles worked ($\chi^2 = 48.241$, $df = 2$, $p = 0.01$). The mean ranks in Table 5.12 are now used to get an initial indication as to the magnitude of the scores and their direction. An inspection of the statistics suggests the following:

- The punishment advertising execution style (2.12) ranks slightly higher than the combination execution style (2.07) and somewhat higher by the adolescent respondents than the positive execution style (1.81)
- The significant difference reported by the Friedman test appears to lay in the difference between the positive execution style and the other two advertising execution styles

To determine where the statistical significance lay between the variables a Wilcoxon tests was subsequently conducted and the results can be viewed in Table 5.12. The findings are as follows:

- Both the combination and the punishment advertising executions were rated significantly higher than the positive executions style at a level of $p < 0.01$
- While the punishment execution style did have a higher mean ranking score than the combination advertising execution style this figure was not statistically significant ($p > 0.501$)

Table 5.12: A summary of the output generated using the Friedman and Wilcoxon tests to determine the A_C

Attitude to the Cause				
Friedman Test 5				
Execution Style	Mean Rank ^a	Chi-square	P-value	
Positive execution	1.81	48.241	$p < 0.01$	
Punishment	2.12			
Combination execution	2.07			
				N = 681
Wilcoxon Test 5				
Execution Comparisons	Z = value	Ties	P = value	Significant
Positive / Combination	6.292	413	0.01 ^b	✓
Punishment / Positive	6.655	422	0.01 ^b	✓
Combination / Punishment	0.672	500	0.501	✗
^a = All mean ranking scores are the ranked averages of the aggregate scores of the four combined attitude to the cause questions				
^b = Alpha level set at for significance at $0.01/3 = 0.0033$ due to Bonferroni adjustment				

Conclusion - Hypothesis Two

Because the combination advertising execution did rate better than the positive execution style at a level of statistical significance ($p < 0.01$) there is some partial support for Hypothesis Two. There was however, no support for the combination advertising execution appeal performing better than the punishment execution. Although not statistically significant, the mean ranks suggested the opposite outcome with the punishment execution style mean rank measuring 2.12,

and the combination approach mean rank measuring 2.07. Hypothesis Two is therefore, rejected.

5.7 Hypothesis Three

The combination advertising execution style will be more effective in producing a greater intention to use restraint when consuming alcohol or refrain from using alcohol altogether (+A_{act}) than both the punishment and the positive advertising execution styles

- Independent Variables:**
- Combination advertising execution
 - Punishment advertising execution
 - Positive advertising execution

- Dependent Variable:**
- Attitude to the act (A_{act})

The three questionnaire questions that were clustered together to comprise the measurement for the A_{act} construct were as follows:

- I think this type of ad would encourage me to talk to a friend who drinks too much alcohol
- I think this type of ad would make me decide not to drink alcohol at all
- I think this type of ad would make me more careful or restrained with alcohol

Prior to doing any analysis of the A_{act} construct an analysis of the individual questions that comprise the construct was undertaken (see Table 5.13). As with Hypotheses One and Two, this process demonstrated a pattern in the data that indicated that the positive advertising execution style was *significantly* less effective than the other two advertising executions at a level of $p < 0.01$. The mean ranking in the data also suggested that in only one out of the three cases, the combination

advertising execution style was marginally better than the punishment execution style. These differences were however, not statistically significant in any of these cases.

Table 5.13: A summary of the Friedman and Wilcoxon test output for each of the questions that comprise the construct A_{act}

Attitude to the Act – Questionnaire Questions					
Friedman Test 1	Execution Style	Mean Rank ^a	Chi-square	P-value	
I think this type of ad would encourage me to talk to a friend who drinks too much alcohol	Positive execution	1.88	37.610	$p < 0.01$	
	Punishment execution	2.10		$df = 2$	
	Combination execution	2.02			
				N = 695	
Wilcoxon Test 1	Execution Comparisons	Z = value	Ties	P = value	Signif
	Positive / Combination	4.535	300	$p < 0.01$ ^b	✓
	Punishment / Positive	5.957	308	$p < 0.01$ ^b	✓
	Combination / Punishment	1.569	288	$p > 0.117$	✗
Friedman Test 2	Execution Style	Mean Rank	Chi-square	P-value	
I think this type of ad would make me decide not to drink alcohol at all	Positive execution	1.93	14.330	$p < 0.01$	
	Punishment execution	2.06		$df = 2$	
	Combination execution	2.00			
				N = 697	

Wilcoxon Test 2	Execution Comparisons	Z = value	Ties	P = value	Signif
	Positive / Combination	1.289	251	$p > 0.197$	✓
	Punishment / Positive	3.139	283	$p < 0.01^b$	✓
	Combination / Punishment	1.745	247	$p > 0.081$	✗

Friedman Test 3	Execution Style	Mean Rank	Chi-square	P-value
I think this type of ad would make me more careful or restrained with alcohol	Positive execution	1.85	45.336	$p < 0.001$
	Punishment execution	2.07		df = 2
	Combination execution	2.08		
				N = 697

Wilcoxon Test 3	Execution Comparisons	Z = value	Ties	P = value	Signif
	Positive / Combination	6.107	308	$p < 0.01^b$	✓
	Punishment / Positive	5.935	336	$p < 0.01^b$	✓
	Combination / Punishment	0.247	289	$p > 0.81$	✗

* Shaded section signifies the highest ranking for that particular advertising execution style

^a = All mean ranking scores are the ranked averages of the aggregate scores of the three combined attitude to the act questions

^b = Alpha level set at for significance at $0.01/3 = 0.0033$ due to Bonferroni adjustment

• **Note:** All mean ranking scores are the ranked averages of the aggregate scores of the four combined attitude to the cause questions

The pattern of response emerging in the data suggested that there were no anomalies or extreme values in the results that might give rise to any unforeseen problems in the data when these questions were clustered to produce the A_{act}

construct. As was the case with the previous two hypotheses, this test gave some assurance that the data in each of the A_{act} constructs was likely to be representative.

Table 5.14: A summary of the output generated using the Wilcoxon and Friedman tests to determine the A_{act}

Attitude to the Act				
Friedman Test 4				
Execution Style	Mean Rank ^a	Chi-square	P-value	
Positive execution	1.82	50.218	<i>p</i> < 0.01	
Punishment execution	2.13			
Combination execution	2.05			
N = 695				
Wilcoxon Test 4				
Execution Comparisons	Z = value	Ties	<i>P</i> = value	Significant
Positive / Combination	6.249	439	0.01 ^b	✓
Punishment / Positive	6.950	464	0.01 ^b	✓
Combination / Punishment	1.569	438	0.11	✗
 ^a = All mean ranking scores are the ranked averages of the aggregate scores of the three combined attitude to the act questions				
^b = Alpha level set at for significance at 0.01/3 = 0.0033 due to Bonferroni adjustment				

After validating the individual questions the data from these three questions was combined to create the *attitude to the act* construct for the three execution styles (*combination, punishment and positive advertising execution styles*). As with the

other hypotheses, the construct was then tested using the Friedman test to determine if any differences exist between the three different advertising executions that might then suggest that one execution style works better than the other. Output from this Friedman test can be viewed in Table 5.14.

The statistics in Table 5.14 indicate that adolescents felt there was a significant difference in the way the three advertising execution styles worked ($\chi^2 = 50.218$, $df = 2$, $p = 0.01$). The mean ranks in Table 5.14 are now used to get an initial indication as to the magnitude of the scores and their direction. A quick inspection of the statistics suggests the following:

- The punishment advertising execution style (2.13) ranks slightly higher than the combination execution style (2.05) and somewhat higher by the adolescent respondents than the positive execution style (1.82)
- The significant difference reported by the Friedman test appears to lay in the difference between the positive execution style and the other two advertising execution styles

To determine where the statistical significance lay between the variables a Wilcoxon tests was subsequently conducted and the results can also be viewed in Table 5.14. The findings are as follows:

- Both the combination and the punishment advertising executions were rated significantly higher than the positive executions style at a level of $p < 0.01$
- While the punishment advertising execution style did have a higher mean ranking score than the combination advertising execution style this figure was not statistically significantly ($p > 0.111$)

Conclusion - Hypothesis Three

As with the previous hypothesis, the combination advertising execution rated better than the positive execution style at a level of statistical significance ($p < 0.01$) providing partial support for Hypothesis Three. There was however, no support for the hypothesis that the combination advertising execution would be more effective than the both the punishment and positive advertising execution approaches. At odds with the hypothesis the punishment advertising execution (mean rank = 2.13) appeared to be marginally more effective than the combination advertising execution (mean rank = 2.05) however this difference was deemed to be not statistically significant ($p = 0.111$). Therefore, hypothesis three is rejected.

5.9 Conclusion

This chapter has analysed and discussed briefly the patterns observed in the data. The method of analysis successfully showed differences in the data with enough accuracy to indicate statistical differences between advertising execution approaches at a level of $p = 0.01$ before Bonferroni adjustment. These differences were clearly visible when viewing all of the three advertising constructs that were of interest to this study, these being the A_{ad} , A_c and A_{act} .

Giving partial support to all three hypotheses, all of the three measures of advertising effectiveness (A_{ad} , A_c and A_{act}) indicated that *the positive advertising execution style* was inferior to both the *punishment* and *combination* advertising execution styles. There were however, no statistically significant differences between the *punishment* and *combination* advertising executions that suggested the combination execution style was better than the punishment execution style thus, the

unconditional acceptance of the three hypotheses was not possible. For example, contrary to the expectations of the hypotheses, there were cases where the punishment execution style in fact appeared to perform better than the combination execution style although this difference was not found to be statistically significant.

The next chapter shall discuss these findings in greater detail, taking a more analytical stance. In addition to this, extra data analysis will take place on the research objectives that were of general interest to this study. These research objectives are now of even greater interest to this study due to the rejection of the hypotheses in this chapter. It may for example, be found that the research that takes place in investigating these three research objectives may bring some insight into why the respondents might have rated the three television advertisements as they did.

Chapter 6 – Discussion on the Findings and Further Analysis, Implications, Research Limitations and Future Research

6.0 Introduction

All three of the research hypotheses in this study have been rejected. In light of this unexpected outcome, this chapter will include a brief discussion that will re-establish why the hypotheses that appeared in this study were originally chosen. The findings regarding the three research hypotheses will then be revisited. The rejection of the three hypotheses has raises a number of new questions as to why the findings were counter to expectations. Because of this, a number of possible reasons for the results will be discussed before further data is analysed and presented.

In particular, three other areas of interest will be investigated looking at additional data that was gathered during the study. This data analysis and discussion is intended to address shortcomings in the availability of some of the rudimentary information that was identified in the literature review on the topic of advertising to adolescents about alcohol restraint. It was found that there was next to no published research on how adolescents feel about marketing communications that speak to adolescents about not drinking too much alcohol. To this end, this upcoming discussion sets out to find out more about the underlying feelings adolescents have toward alcohol health promotion as well as to determine whether adolescents feel they need to feel positively toward health promotion before they will be responsive to it.

With the three hypotheses of this study being rejected it has perhaps become even more important for this study to try and uncover what were the pre-existing

feelings of respondents towards alcohol health promotion and its advertising. So with this in mind, gathering information on this topic is not only a worthwhile activity in itself but the information may also have the explanatory power to give further insight into why the hypotheses in this study were rejected. This chapter also discusses the implications of this study, the limitations of this research and the recommendations for any future study.

6.1 Summary - The 'Best' Advertising Execution

The primary aim of this study was to try and determine which of three advertising executions would be the most effective advertising approach to use when trying to communicate with adolescents about alcohol restraint. Advertising campaigns specific to adolescents aged 14 – 17 are a recent phenomenon in Australia. It is perhaps for this reason that at this point in time, there is very little information available in the public domain to assist health promotion planners to choose the most effective advertising approach to use on adolescent drinkers. It has therefore been argued that information is required to assist researchers if they are to have any hope of understanding what advertising approach is most appropriate to use in this situation.

Recapping on the key information that has been presented in this thesis, it has been identified that the dominant methods used by health authorities to try and shape adolescent attitudes and behaviours include threat-based advertising executions and positive reinforcement advertising executions. It was found that the most recent campaign by the Commonwealth Government has attempted to communicate an alcohol restraint message to adolescents using a combination based advertising approach that uses both a threat and a reward that was incorporated into the one advertising communication.

The literature in this dissertation presented anecdotal evidence to suggest that the combination advertising execution would perhaps work somewhat better than the

punishment advertising execution for a number of reasons these being for example where: 1) fear is used appropriately; 2) the communication steers away from a straight punishment message; 3) it reframes from preaching and supplies useful information; 4) it appears it is not empowering for the young people; 5) it allows the young person to make their choices independently. In addition to these points, this advertising approach used the innovative approach of building in a comparative device demonstrating a good decision versus a bad decision. With all this being said, there is however no direct research available in the public domain to support this type of advertising execution.

The three hypotheses for this study were therefore constructed and it was hypothesized that the more recent and innovative combination advertising execution would be more effective than either the positive or punishment reinforcement styles. The constructs that adolescents were asked to rate required that they view the three stimulus advertising executions before scoring their attitudes to: *the advertisement* A_{ad} ; *the cause* A_c ; *adopting the prescribed behaviour* A_{act} . To this end, three advertising portrayals were prepared and presented to 710, year 9 and 10 Western Australian school students to try and determine which advertising execution appears to be the most effective

Once the data were collected and analysed it was concluded that this study had failed to produce results that would unequivocally support the use of the combination advertising execution styles over *both* the positive advertising execution and the punishment advertising execution in the way that was originally hypothesised. Of the ten items that were taken from the questionnaire and measured none of these items independently suggested the combination advertising execution was *collectively* more effective than the other two advertising executions. At this point evidence did however start to emerge to suggest that the positive advertising execution appeared to be inferior to the other two advertising approaches.

Similarly, when the items were clustered into the A_{ad} , A_C and A_{act} constructs and measured, the hypothesis still could not be supported. These findings were significant at a level of $p = 0.01$. These findings did however *in effect*, give partial support to the hypotheses suggesting that the combination advertising execution is likely to be somewhat better than the positive advertising execution. While the hypotheses of this study were not strongly supported there were valuable insights that emerged from this study. These findings will now be briefly discussed.

The results clearly indicated that the respondents in this study rated the non-threatening *positive execution* style as inferior to both of the more threatening *punishment* and *combination advertising executions*. Content covered in the literature review of this study suggested that adolescents would not react well to threats from the adult world or from those in a position of authority. The literature suggested that adolescents are more likely to respond to information that is delivered in a non-threatening way that enables them to make positive choices. For example, Burns and Thompson (1998) comment that “authority figures as messengers may be ineffective, messengers and campaigns must be seen to speak from within the adolescent’s world in ways that are credible, yet non-judgemental. They must talk to the target audiences, not at them” (p.110). Qualitative research by Elliot and Shanahan (1999) for the National Alcohol Strategy indicated that adolescents wanted freedom where alcohol was concerned but also they required clear guidelines on alcohol use (Commonwealth Government, Online, www.health.gov.au/pubhlth/alcoholcampaign/resource/2medsumm).

Evidence was not found in this study to support the use of less threatening advertising executions. Counter to expectations, it was found that the more threatening *punishment* advertising execution was rated similarly or even better than the arguably more balanced *combination* advertising execution. The positive advertising execution was found to be significantly less effective than the other two advertising executions. The data not only supported the more threatening advertising executions but so did the comments that were made by a number of the respondents

in this study. A few of these responses are presented below and take the following tone:

- *Why do you show us all these ads [positive executions] kids our age just need to be scared*
- *The really bad ones are the best where the guy vomits or gets beaten up. You're only going to listen if you're scared of it*
- *No one our age listens unless you make them feel scared or they're going to get into trouble*

Why the respondents rated threatening advertising executions more highly than the non-threatening advertising executions is unclear. The findings discussed in chapter 5 seemed to suggest that adolescents still fear overt threats such as being embarrassed, being injured or being caught doing the wrong thing by their parents (Health Promotion Services, 1996b). Perhaps these threatening thoughts seem to be more at the forefront of the adolescent mind than are the positive outcomes that might be accrued through the appropriate use of alcohol. Hypothetical rewards from alcohol restraint such as *winning the girl or boy* or just being popular may be a rather lacklustre counter reward by comparison with a strong threat that is frightening.

Perhaps of even more interest is the apparent similarity in results between the punishment and combination advertising execution styles. Despite the rather stark differences between both the punishment and combination creative executions, and the differences in the length of the viewing times for the punishment and combination advertising executions, the effectiveness scores that respondents gave for each of these advertisements were strikingly similar. It was only in the case of the A_{ad} construct, where the combination appeal on one occasion seemed to work marginally better than the punishment approach. In contrast, when measuring both the A_c and A_{act} constructs, the punishment approach on both of these occasions

scored marginally better. These findings suggest perhaps that the advertising affect that respondents were scoring lay in the punishment affect and this punishment affect may take precedent over all other forms of communication approaches that health authorities might try.

Certainly the combination advertising execution was thought to be the approach that would be most effective. While no direct comment was made by any authors in the literature review of this dissertation about the likely effectiveness of the “combination” type advertising execution other discussions that were presented pointed indirectly toward the possible utility of this type of execution. For example, authors such as Ray and Wilkie (1970), Rogers (1983), Latour and Rotfeld, (1997) and Witte and Allen (2000) suggested that while threat based advertising had the ability to create facilitating effects, it also had inherent limitations in its approach that also created inhibiting effects that could dampen the success of this approach. For these communication to perform at the highest level it has therefore been suggested that threat-based communications should be produced in particular way. For example, the qualities that were believed to be needed in a successful threat-based advertising execution include the following:

1. The threat must represent a severe outcome if they did not adopt the behaviour
2. The threat must have impact to grab and hold attention
3. The threat must be believable to the viewer and the viewer must feel susceptible to the threat
4. The viewer must be left with the belief that they have the power to avoid the threat
5. The viewer must be given the knowledge, method or help that they feel they need to effect change

In effect, the combination execution used in this study had *all* of these qualities whereas the punishment execution only had the first three of these qualities. It is for this reason it was expected that the punishment execution would underperform when compared alongside the more sophisticated combination advertising execution that was used in this study. Respondents did not indicate a tendency to reject the punishment execution even though it was clearly more threatening and even though it offered no solution in its creative to offset the likelihood that the audience would either consciously or subconsciously resist the threatening message.

Another reason why the combination type advertising execution was expected to perform more strongly than the other methods was because it was currently the ‘in-vogue’ advertising approach that was being used in Australia to address the issue of reducing adolescent binge drinking. This study has not however lent support for the health authorities current approach. This study only goes so far as to suggest that the fear component was certainly in operation in these advertisements. Health promotion planners might therefore be better served by using straight threat-based advertising executions that are shorter, more threatening and less empathic than the combination advertising executions. While this combination advertising execution was found through research to be justified as the most likely advertising execution to succeed (Ray & Wilkie, 1970; Rogers 1883; Latour & Rotfeld, 1997; Witte & Allen, 2000) this research failed to anticipate the way that the respondents in this study would react to the combination and punishment advertising executions.

These results will be briefly discussed again in the limitations section of this chapter and again, in the recommendations for further research. Section 6.2 will look into adolescent’s pre-existing attitudes into alcohol health promotion and will assess how they believe they need to feel before they will be supportive of alcohol health promotions. This exercise is thought to be important because it enables the researcher to assess the respondent’s prevailing attitudes towards such issues as 1) anti-binge drinking advertisements, 2) health promotions and messages targeted at

the individual, 3) health promotion messages targeted at peers and 4) health promotion messages targeted at the wider adolescent population.

6.2 Respondents' General Attitudes toward Alcohol Restraint Communications

The primary focus of this study has been to establish how the three different advertising executions would perform when each of the executions were compared alongside each other. With this part of the study complete, the more general area of interest for this study will now be to analyse and present data pertinent in assisting with a greater understanding of the prevailing attitudes of the adolescents respondents toward health promotions at the time when this study was conducted.

A source of information that has been of particular interest to this study has come from the body of literature in marketing that discusses *attitudes*. For example, research that has been presented previously in this thesis has presented evidence to suggest that a persons' *attitude toward the advertisement* and *attitude toward a cause* both had the potential to affect that individual's openness to consider adopting the prescribed behaviour. The literature was however unable to say whether these research findings on attitudes would translate specifically to adolescents. The literature was also unable to predict what the salient mood of an adolescent audience in our community will be toward alcohol health promotions and whether anti-binge drinking communications will be received positively or negatively. Similarly, there was no indication as to whether the approval of a health authority's cause or their advertisements was likely to affect an adolescent's openness and responsiveness to health promotion advertising.

This study has already returned data that was contrary to the expectations of the hypotheses, evidence suggested that the more threatening and less compromising *punishment* advertising execution was as effective, as the *combination* advertising

execution which included both positive and negative elements. Why adolescents were so receptive toward the punishment communication can only be speculated on however, research into attitudes does suggest a positive attitude toward a cause can be a predictor of advertising success. Similarly, a positive attitude toward an advertisement can transfer into a positive attitude toward the cause. In addition to this, research has suggested a positive attitude toward both the cause and its advertisement translates into a positive attitude towards buying a product or in this case, adopting a prescribed behaviour.

It is of interest to this study therefore to determine how the adolescent audience in this study felt towards the cause of anti-binge drinking health promotions and alcohol restraint advertisements. For example, it could be speculated that a high level of acceptance of the anti-binge drinking cause might translate into an unusually high tolerance of threatening advertising messages. With this in mind, a number of areas have been identified as being worthy of further investigation. The questions that have been raised for attention include the following:

- 1) Are adolescents supportive of the Health Authority's calls for alcohol restraint when this cause is framed as - *a general societal concern*?
- 2) Are adolescents supportive of the Health Authority's calls for alcohol restraint when this cause is framed as - *an adolescent concern*?
- 3) Are adolescents supportive of television advertising that '*talk to the general community*' about not drinking too much alcohol?
- 4) Are adolescents supportive of television advertising that '*talk to adolescents*' about not drinking too much alcohol?
- 5) Do adolescents *personally* feel they need to approve of and like alcohol health promotions before they will be influenced by them?

To follow will be an analysis of those questionnaire questions that were thought to relevant to the area of adolescent attitudes to alcohol restraint health promotion.

6.2.1 Adolescents Generally Support Anti-binge Drinking Communications

The adolescent respondents were asked two paired, comparative questions to get some level of understanding as to their feelings adolescents have toward health authority communications that:

- 1) Talk to the general community
- 2) Talk specifically to adolescents as a distinct group

By asking this question the output could then be used to assess:

- 1) How receptive adolescents are to health authority promotions that attempt to talk to *the general community* about drinking too much alcohol
- 2) Whether adolescents are *as receptive* to health authority communications that are *specifically* targeted at *adolescent* alcohol drinking

The literature has suggested that a positive attitude toward the advertisement or object are linked and can lead to a greater liking of the brand and an increased intention to buy the brand (MacKenzie et al., 1986; Beil, 1990). In this application, this might for example translate to liking of the cause or the prescribed behaviour. Conversely, if people are ambivalent toward an advertisement or communications regarding a cause this may lead to a rejection of that advertisement and cause. This

rejection of the advertisement or cause might also lead to a rejection of the prescribed behaviour.

In addition to this theory into attitudes, the literature has suggested in no uncertain terms that the adolescent audience can be particularly hard to communicate with, citing the following reasons:

- Adolescents often are more cynical than adults with greater marketing literacy that requires communication at a grass roots level, communicating with integrity, credibility and relevance (Carroll, 1995; Burns & Thompson, 1998; National Expert Authority Committee on Alcohol, 2000)
- Adolescents are at a stage in their development where they are striving for independence in their lives and as such often find themselves resisting the communications from their adult world (Noe, 1969; Jessor & Jessor, 1977)

One might therefore, reasonably suggest that the efforts of health promotion authorities might be processed negatively. To follow is the data analysis for this section.

6.2.2 Respondents’ Level of Support for Health Promotions

The data suggests that adolescents are generally supportive of the health authority’s attempts to talk to both the *general community* and *teenagers* specifically about not drinking too much alcohol (see Figures 6.1 and 6.2). The results indicated that 63 per cent of adolescents *either strongly support or support* health authority attempts to talk to the general community about not drinking too much alcohol. This compares with only 5 per cent of adolescents who either *strongly oppose or oppose* health authority communications.

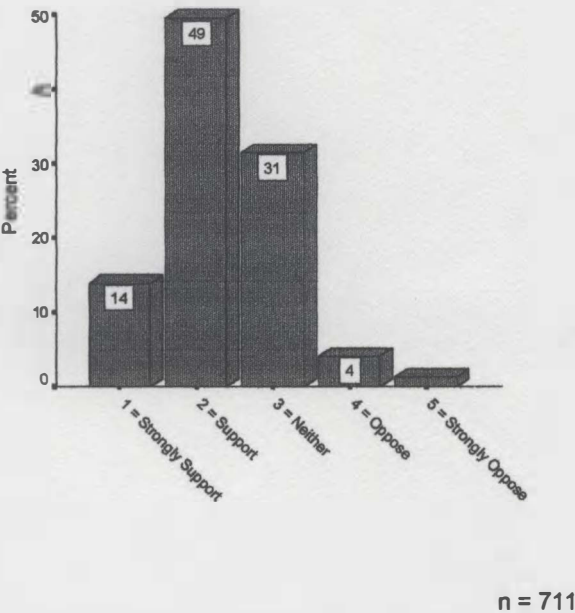


Figure 6.1: Would you support the health authority’s attempts to talk to the *general community* about not drinking too much alcohol?

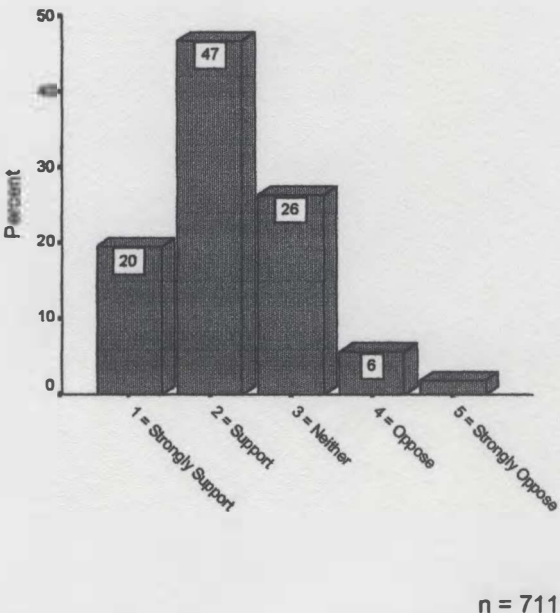


Figure 6.2: Would you support the health authority’s attempts to talk to *teenagers* about not drinking too much alcohol?

This data seemed to indicate that the respondents were marginally more supportive of those promotions that target teenagers. Sixty seven per cent of adolescents either *strongly support or support* the health authority’s attempts to talk to teenagers about not drinking too much *alcohol*. This compares with only 7 per

cent of adolescents who either *strongly oppose or oppose* health authority communications. To determine whether there was a significant difference in attitudes toward health authority communications when these communications were targeted at the general community versus teenagers, a Wilcoxon matched-pairs test was conducted. This test indicated that there was not a significant difference and adolescents are just as supportive of alcohol restraint communications whether they are targeted to the broader community or to adolescents specifically. There was no difference at a level of 0.01 ($Z = 2.229$, $N = 246$, $p = 0.023$).

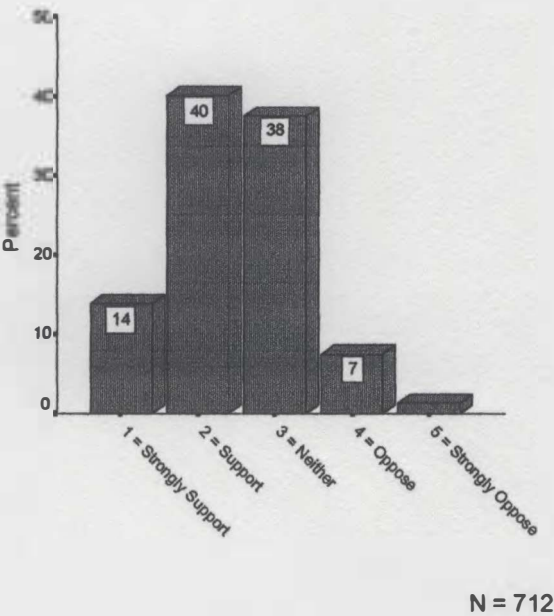


Figure 6.3: How do you feel about TV ads you see that talk to the general community about not drinking too much alcohol?

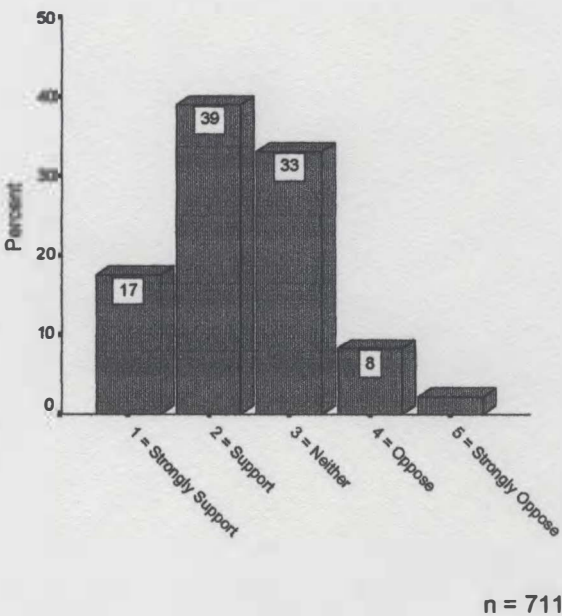


Figure 6.4: How do you feel about TV ads you see that talk to teenagers your age about not drinking too much alcohol?

Adolescents were then asked whether they are generally supportive of television advertising that attempts to talk to people about not drinking too much alcohol. The results indicated 54 per cent of adolescents either *strongly support or support* television advertising that attempts to talk to the general community about not drinking too much alcohol. This compares with only 8 per cent of adolescents

who either *strongly oppose* or *oppose* this type of television advertising (see Figure 6.3 and 6.4).

Again, respondents showed a slightly higher level of support for communications targeted at their teenage group with 56 per cent of adolescents indicating either *strong support* or *support* for television advertising that attempts to talk to teenagers about not drinking too much alcohol. This compares with only 9 per cent of adolescents who either *strongly oppose* or *oppose* health authority communications. To ascertain whether this marginal difference was significant, a Wilcoxon match-pairs test was conducted. This indicated that the differences in the levels of support were not significant at a level of 0.01 ($Z = 1.637$, $N = 240$, $p = 0.01$).

In conclusion, there appears to be some evidence here to suggest that adolescents in this study are generally quite receptive toward any alcohol restraint communications the health authority might initiate. Initially, the data suggests that adolescents are marginally more supportive of communications that were specifically targeted to them as compared with the general community. However this difference was found to be not significant. A review of the literature seems to suggest a substantial amount of negativity toward initiatives that address adolescent alcohol misuse might be expected. This however was not found to be the case in this study. To the contrary, adolescents seem to have a rather accepting attitude toward the need for such communications.

6.2.3 Respondents' Personal and Projected Attitudes Toward the 'Alcohol Restraint Cause' and its Advertising

To investigate adolescent beliefs about anti-binge drinking communications a bit more deeply, the respondents were then asked questions to try and ascertain whether they are any less receptive to health authority communications if they are

targeted to the individual adolescent in contrast to their peers as a group. By asking these questions in this way it might then be possible to identify whether a pattern of beliefs exist that suggest the individual might feel alcohol misuse is an issue that is not relevant to them but an issue more relevant to their peers.

Five questions were asked of the adolescent respondents to get some level of understanding as to their feelings about television advertisements that talk to people their age about drinking alcohol (projective questions) and advertisements that talk directly to them (Personal, non-projective). Note that some of these questions are projective whereas some are specific to the individual. Projective techniques are appropriate where the researcher believes that the respondents may be hesitant in relating their true opinions, as may be the case here, where alcohol is of concern (Burn & Thompson, 1999). In this case, respondents may not voice their true feelings about adolescent drinking because it might challenge their sense of maturity or question their mastery of their own lives or their personal right of self-expression. To this end, five different topics were investigated. These topics included:

- 1) Adolescent's *general liking of the advertisements* [Non-personal, projective]
- 2) Adolescent's belief in the *worth of messages in the advertisements* [Non-personal, projective]
- 3) Adolescent's feelings about how well the *advertising can hold their attention* [Personal]
- 4) Adolescent's feelings as to the *importance of the advertising that is targeted at adolescents* [Non-personal, projective]
- 5) Adolescent's feelings as to the *relevance of this advertising to them* [Personal]

The questions were asked prior to conducting the advertising treatment of the study in order to avoid any distortions that might creep into the data, post treatment. These results are summarised in Figures 6.5 – 6.9. Respondents were divided as to whether they generally liked television advertisements that talk to people their age about drinking alcohol with 27 per cent reporting they *strongly disagree* or *disagree* that they like these advertisements and 27 per cent reporting they either *agree* or *strongly agree* that they like these type of television advertisements (see Figure 6.5). The largest group of 46 per cent *neither agreed nor disagreed* that they liked these types of advertisements.

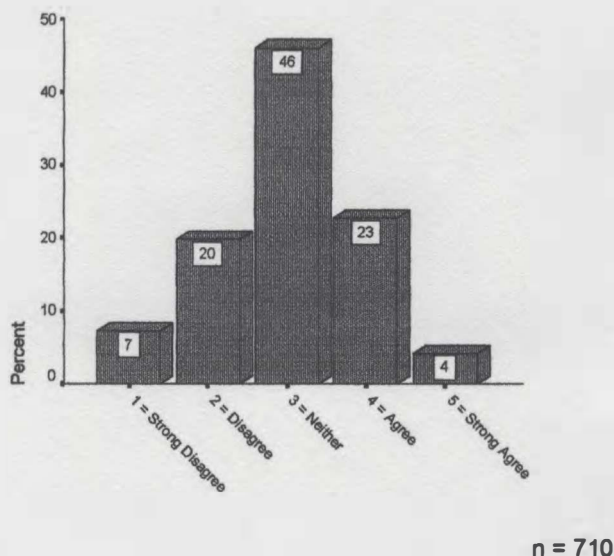


Figure 6.5: *I generally like ads on TV that talk to people my age about drinking alcohol....*

While the respondents might show mixed feelings towards these types of television advertisements that try to talk to young people their age about drinking too much alcohol they do seem to feel that these type of advertisements in general, do make a good point (see Figure 6.6). For example, 60 per cent of respondents *strongly agree* or *agree* that television advertisements that talk to young people

about drinking alcohol tend to make a good point. Conversely, only 15 per cent of respondents *disagreed* or *strongly disagreed* with this statement.

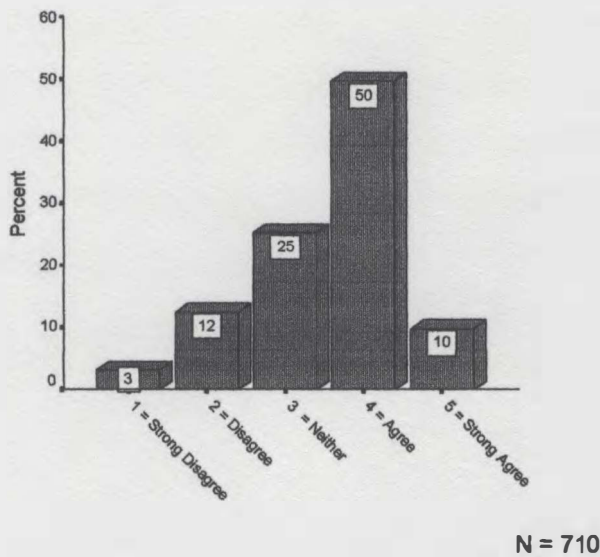


Figure 6.6: *I feel that ads on TV that talk to people my age about drinking alcohol tend to make a good point....*

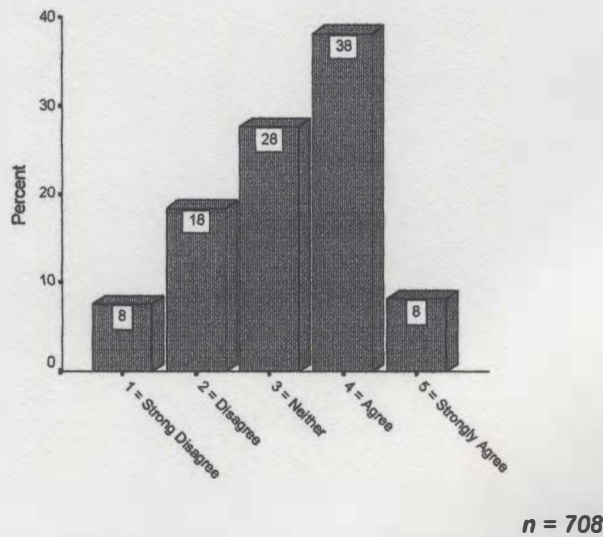
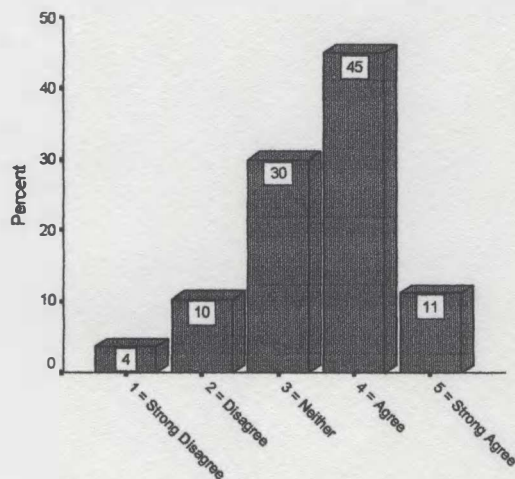


Figure 6.7: *When I see ads on TV that talk to people my age about drinking alcohol I tend to take notice....*

46 per cent of respondents indicated that they *strongly agree* or *agree* that they tend to take notice of television advertisements that talk to people their age about drinking alcohol. Only 26 per cent of respondents indicated they *strongly disagree* or *disagree* that they take notice of these types of advertisements (see Figure 6.7).

56 per cent of respondents *strongly agreed* or *agreed* that they feel that television advertisements that talk to young people about drinking alcohol are important to people their age. Conversely, a minority (14 per cent) either *strongly disagreed* or *disagreed* that these types of television advertisements are important to people their age (see Figure 6.8).



n = 708

Figure 6.8: *I feel that ads on TV that talk to people my age about drinking alcohol are important to us....*

To try and assess whether adolescents feel that health authority communications were as relevant to themselves as they were to others, respondents were asked whether they feel that advertisements on television that talk to people

their age about drinking alcohol are relevant to them [Personal]. The scores that emerged from this question differed considerably from the previous question that was projective in nature (see Figure 6.9). This previous question reported that 44 per cent of respondents either *strongly agreed* or *agreed* that they feel that advertisements on television that talk to people my age about drinking alcohol are important to us [Teenagers my age] (see Figure 6.8). While the wording of the previous question was slightly different the scores seemed markedly different, with 56 per cent for the prior question and 44 per cent for the later.

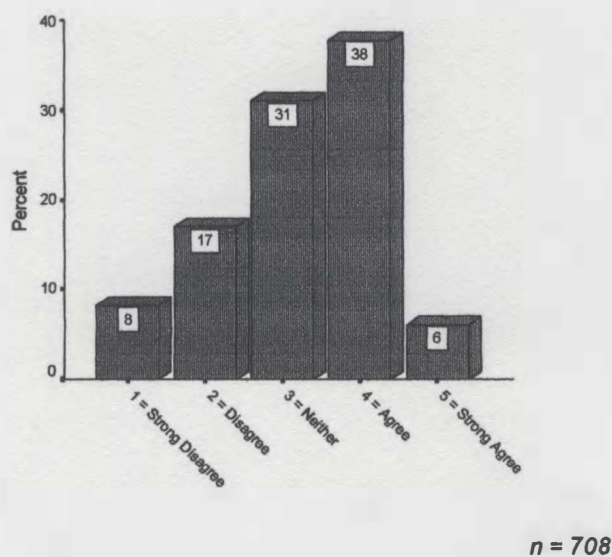


Figure 6.9: *I feel that ads on TV that talk to people my age about drinking alcohol are relevant to me....*

The data in this section has described respondent’s attitudes toward alcohol restraint communications. In the broader sense, this data suggested that respondents are generally supportive of the Health Authority’s attempts to talk to people about alcohol restraint. Some evidence suggested adolescents were even marginally more supportive of communications that specifically targeting their age group. Recapping, the data in this section has indicated that adolescents in the majority of cases, strongly agreed or agreed with such statements as: 1) *These advertisements tend to*

make a good point; 2) I tend to take notice of these advertisements; 3) These advertisements are important to us; 4) These advertisements are relevant to me.

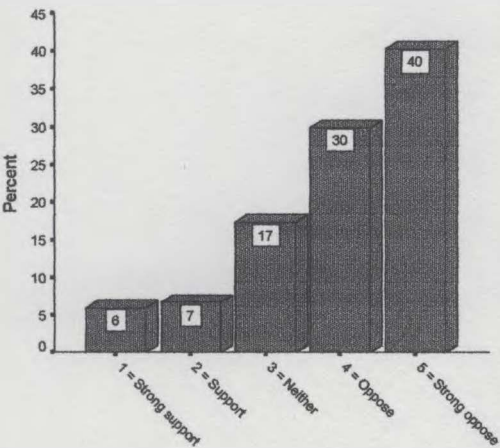
Worthy of comment also was adolescents' lower scoring of the health promotion communication's 'relevance to themselves' which might be suggesting that while they do recognise a problem exists or could occur with alcohol misuse, they feel that their peers are more '*at-risk*' than they are. A review of the data in Figures 6.5 –6.9 indicated that the three non-personal, projective techniques did record the three largest levels of support for health promotion advertising.

The findings may in part, be supported by the previous discussion of Atkin (1993) who suggested adolescents depend relatively heavily on television for understanding and guidance on why alcohol is consumed, its benefits and its drawbacks. Therefore, the positive attitudes by adolescents toward the alcohol health promotion advertising that were described in this study may have been more a reflection of their positive attitudes toward television as a communication and entertainment tool rather than to the messages themselves. Television may be seen as an important learning and socialisation tool by adolescents and therefore, the content on television may take on a higher weighting or value than might otherwise be anticipated in for example, an older audience. In regard to television, Atkin (1993) suggested young adolescents' low level of experience with alcohol and their limited opportunities for direct observation of drinking by others, especially in bars and at parties, makes them more susceptible to processes of cultivation and more receptive to vicarious observational learning. Perhaps this is why television advertising appears to be reasonably well supported by adolescents as an intervention and learning tool for reducing alcohol misuse.

6.2.4 Adolescent Support or Opposition to Community Initiatives to Reduce Alcohol Misuse

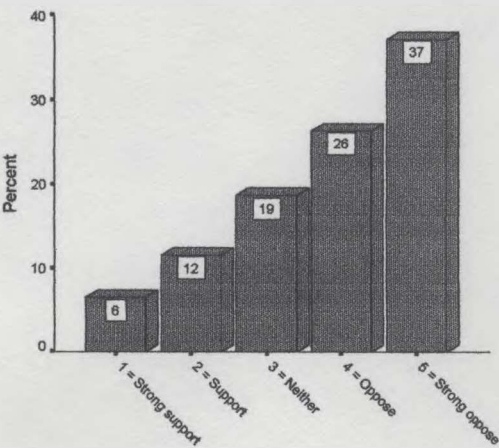
In this study nine proposed ideas were presented to adolescents on how the community or health authorities could take action to reduce the incidence of teenagers drinking too much alcohol. Of those nine proposals, it was found that five of these proposals were opposed rather strongly and a sixth proposal was opposed moderately. Only three of the proposals that were presented in this questionnaire study received any sort of support. To follow is a brief review of some of the findings.

Those proposals that were opposed...,



n = 712

Figure 6.10: Raising the legal drinking age?



n = 712

Figure 6.11: Increasing the price of alcohol?

70 per cent of respondents either *strongly opposed* or *opposed* raising the legal drinking age while only 13 per cent of students indicated support for this proposal (see Figure 6.10). Sixty three per cent of respondents indicated that they

strongly opposed or opposed increasing the price of the alcohol while only 18 per cent of students indicated they had support for this proposal (see Figure 6.11).

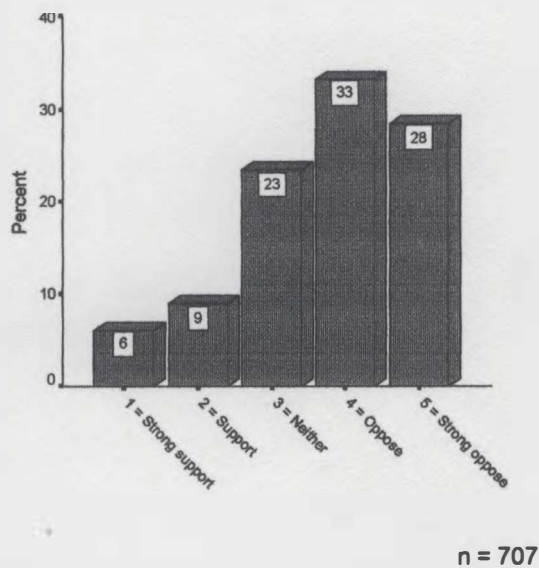


Figure 6.12: Reducing the number of places that sell alcohol?

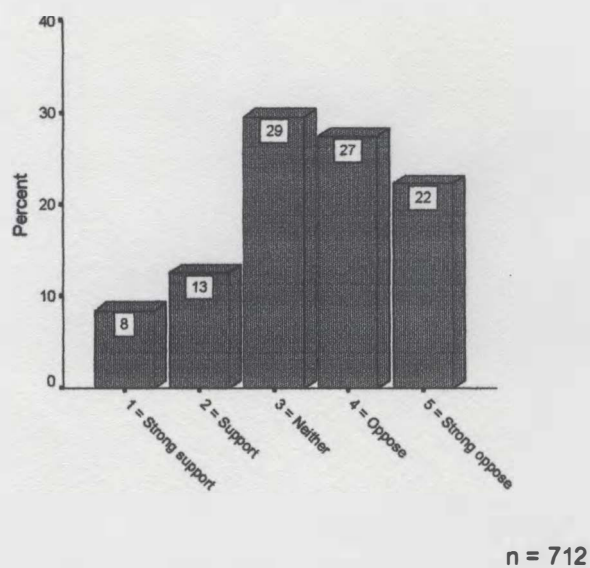


Figure 6.13: Banning alcohol sponsorship of sport and sporting teams?

Sixty one per cent of respondents either *strongly opposed* or *opposed* reducing the number of places that sell alcohol while only 15 per cent of respondents supported this proposal (see Figure 6.12). Forty seven per cent of respondents either *strongly opposed* or *opposed* banning alcohol sponsorship of sport or sporting teams while 21 per cent of respondents showed some support for this proposal (see Figure 6.13).

Rejecting an abstinence message, 47 per cent of the adolescent respondents indicated that they either *opposed* or *strongly opposed* increasing the amount of advertising on television educating people about *stopping drinking altogether*. Thirty six per cent of respondents indicated that they either *strongly opposed* or *opposed* limiting television advertising that sells alcoholic drinks until after 9.30 at night (see Figure 6.15). Thirty two per cent of people indicating to the contrary indicating *strong support* or *some support* for this proposal.

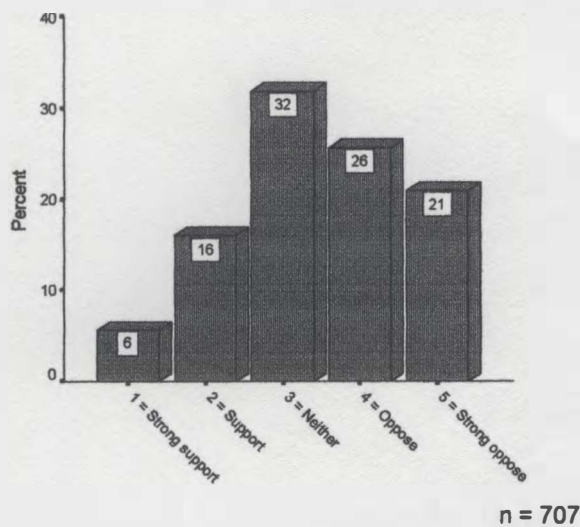


Figure 6.14: *Increase the amount of ads on the TV educating people to stop drinking altogether?*

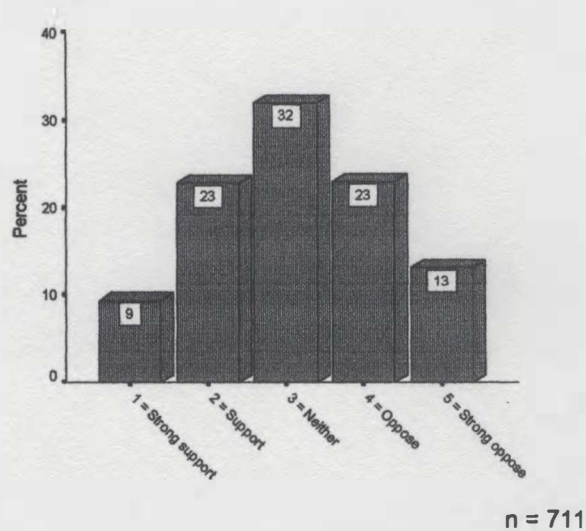


Figure 6.15: *Limiting ads on TV that sell alcoholic drinks until after 9.30 at night?*

Those proposals that were supported...,

Only three of the nine proposed methods for reducing the incidence of alcohol misuse by adolescence had any general support in this study. Supporting previous findings in this study, 57 per cent of respondents either *strongly supported* or *supported* increasing the amount of television advertising educating people to drink more carefully with only 15 per cent of respondents *strongly opposed* or *opposed* this proposal (see Figure 6.16). Further support was found for anti-binge drinking health promotions when respondents were asked to indicate how they would allocate \$10 over three health authority initiatives all of which were aimed at reducing alcohol abuse in the community. The findings suggested adolescents supported the allocation of funds in the following ways:

- 1) *Education* about alcohol (mean = 3.70, mode = 4)
- 2) *Treatment* for alcohol misuse (mean = 3.25, mode = 3)

3) *Enforcing* misuse of alcohol using the *law* (mean = 3.05, mode 3)

A one-way between subject ANOVA was performed to determine whether the apparent differences in spending priorities were statistically significant. There was a significant difference between *education* and the other two spending priorities indicating that *education* was the preferred spending priority with these respondents ($F = 16.257, df = 2, p = < 0.01$). This difference between law enforcement and treatment was non-significant.

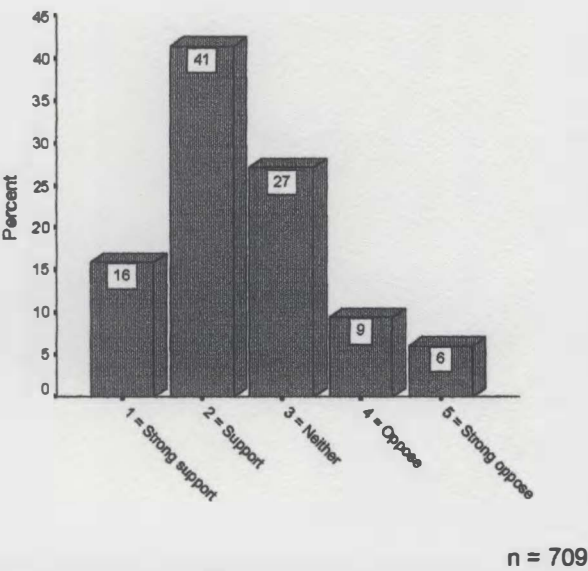


Figure 6.16: Increase the amount of ads on the TV educating people to drink more carefully?

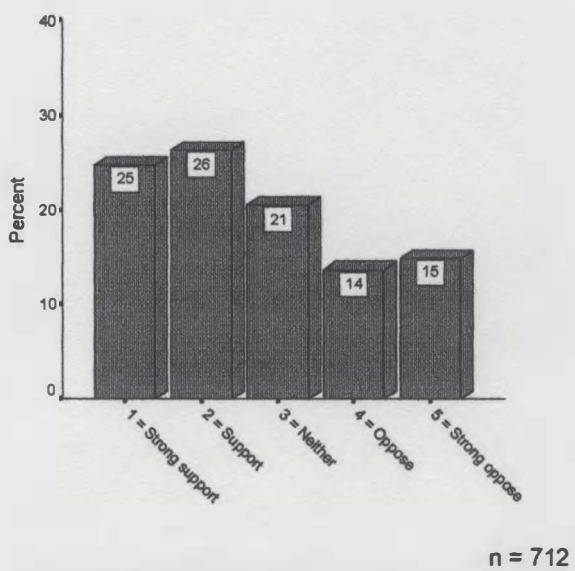


Figure 6.17: Increase penalties for those people selling alcohol to underage drinkers?

These findings regarding spending on anti-binge drinking priorities were consistent with earlier findings by the National Drug Strategy Household Survey (1998) in their order of priority although the differences in the spending were more pronounced and thus, more conclusive. Recapping, the NDSHS respondents scored in the following way: 1) *Education* 4.37; 2) *Treatment* 3.07 and; 3) *Law enforcement* scoring 2.56. Perhaps these differences in the magnitudes of the responses to this

question were because the adult respondents in the NDSHS were less inclined to answering these surveys using *middle-of-the-road* answers.

Other findings that received support include, 51 per cent of respondents indicated they *strongly support* or *support*, increasing penalties to those people selling alcoholic drinks to underage drinkers while 29 per cent of respondents *opposed* or *strongly opposed* this proposal (see Figure 6.17).

In the past, Australian health authorities have undertaken activities that try to introduce young people to discos, music events and other public events without alcohol being present, for example, Blue Light Discos or the Rock Eisteddfod. This is done in an effort to get across the message that you do not need alcohol to enjoy yourself. Perhaps in support of these initiatives, in this study 43 per cent of respondents indicated they either *strongly support* or *support* increasing the amount of alcohol free events while only 25 per cent of respondents either *strongly oppose* or *oppose* this proposal (see Figure 6.18).

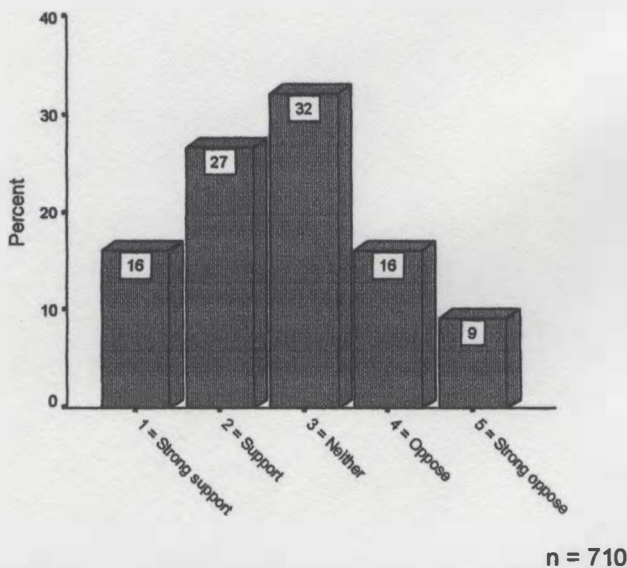


Figure 6.18: Increase the amount of alcohol free public events?

6.2.5 Do Adolescents Need to feel Positively About Health Promotions Messages?

The literature has suggested in the past that a positive attitude toward the object or its advertising will facilitate an acceptance of the advertisement, and hence, greater yielding to the intended message. Little evidence however, appears to be available in the literature to identify whether this marketing theory applies to adolescents or indeed, alcohol health promotions. It is for this reason that this study has already endeavoured to try and more fully understand whether adolescents do in fact feel positively toward the Health Authority's alcohol restraint communications. Further to this, it is also of interest to this study to try and find evidence to suggest whether indeed a positive attitude toward health promotion communications might suggest a positive attitude toward adopting the prescribed behaviour.

Initially, to gauge how potent television might be as a communication tool that targets adolescents, respondents were asked whether they rely on television advertising to find out about products or things they should know about. The data suggested respondents were not strongly reliant on television for this purpose with 38 per cent of respondents either *strongly disagreeing* or *disagreeing* that they rely on television advertising to find out about products or things they should know about. This compares with 35 per cent *strongly agreeing* or *agreeing* to this statement. This aside, as the upcoming data suggests, adolescents still appear to be active observers of television advertising.

The data indicated 92 per cent of respondents *strongly agreed* or *agreed* that they like some television advertisements better than others and, 86 per cent of respondents indicated that they either *strongly agreed* or *agreed* that they tend to notice those television advertisements they like (see Figures 6.19 and 6.20).

Other results indicated adolescents do not find alcohol restraint advertising of interest to them for example, when ranking on a scale from one to seven, the

respondents in this study ranked advertising that focused on the *prevention of alcohol misuse* as being the second *least interesting* topic to them (16 per cent) with *the environment* being least interesting (25 per cent). Conversely, they ranked clothes (22 per cent) followed by *athletic shoes* (18 per cent) as being the *most interesting* advertising topic to them. Again, looking at this second measure, *preventing alcohol misuse* was in this case ranked 7, or last, on a scale of *most interesting* (see Table 7.2). Previous findings that have been presented in this chapter have indicated that adolescents do have strong support for these alcohol restraint advertising and they do believe in its use but this aside, this finding seems to indicate that adolescents still do not find this type of advertising engaging as they might with other forms of advertising.

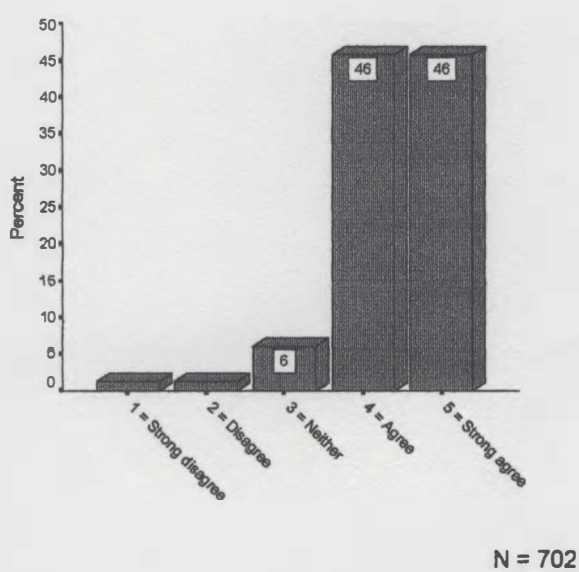


Figure 6.19: Some ads I like better than others....

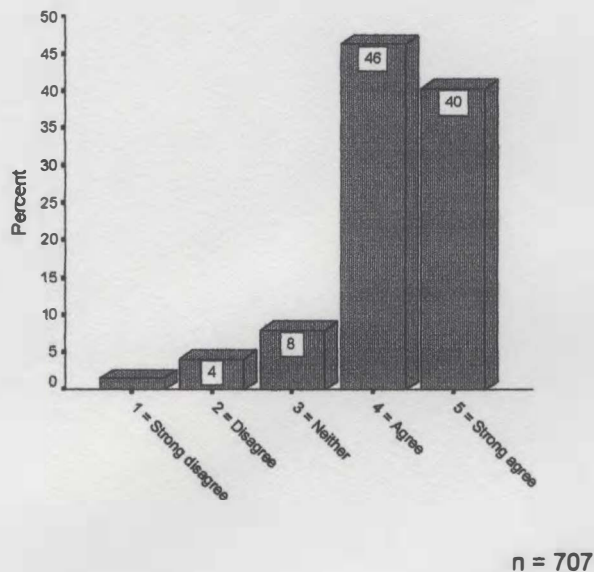


Figure 6.20: I take more notice of ads I like....

Connolly, Casswell, Zhang, and Silva (1994) suggest where commercial advertisements and moderation messages exist concurrently, as they usually do in the mass media, any influence of moderation campaigns will be affected by the strength of commercial advertising campaigns and vice versa. This being the case, if the

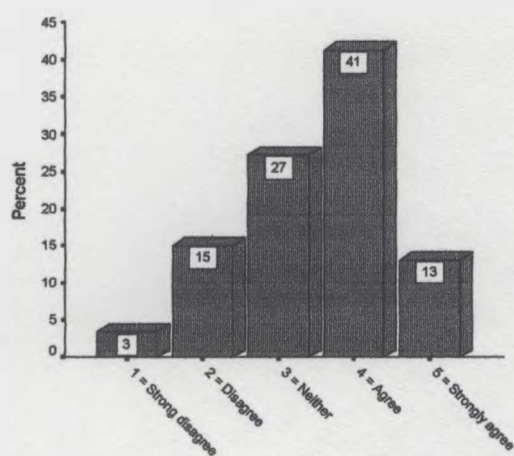
findings from this study were to translate to the naturalistic setting, then these types of alcohol restraint communication would face considerable competition originating from the countervailing forces of pro-alcohol advertising and other marketplace clutter. This clutter is capable of overwhelming alcohol restraint messages with the more interesting pro-alcohol advertising as well as by the more interesting product categories such as for clothes, athletic shoes and soft drinks.

Table 7.2: Adolescent ranking on most interesting and least interesting advertising

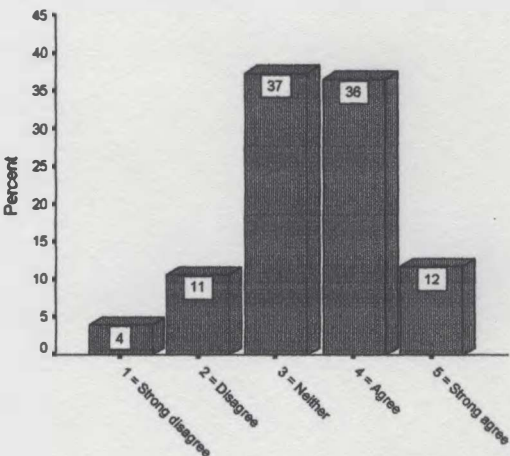
Most Interesting			Least Interesting		
Rank	Advertising..	%	Rank	Advertising..	%
1	Clothes	22	1	The Environment	25
2	Athletic Shoes	18	2	Preventing Alcohol Misuse	16
3	Compact Discs	17	2	Computers	16
4	Computers	14	3	Clothing	14
5	The Environment	10	4	Athletic Shoes	12
6	Soft Drinks	9	5	Soft Drinks	9
7	Preventing Alcohol Misuse	8	6	Compact Discs	8
n = 637			n = 637		

Atkin (1993) forwarded a compelling argument to suggest that alcohol restraint television advertising targeting adolescent alcohol misuse was quite inappropriate citing the clutter, competition and the low level of consumer involvement as being his reason for feeling this way. The results from this study have perhaps therefore lent further support to this line of thinking. These most recent findings in this study suggest adolescents regard binge-drinking advertising as mundane when compared with some other competing communications. This being the case, it could be argued health promotion authorities are likely to face

considerable challenges in trying to get through to their adolescent audience using the tool of advertising no matter what the media channel they ultimately use.



n = 710



n = 710

Figure 6.21: *Products or things that are important tend to use TV advertising.....*

Figure 6.22: *Products that I like tend to have good advertising...*

Recalling, the literature review that was undertaken in preparation of this thesis identified a number of competitive voices that work against Australian anti-binge drinking promotions. These competing voices have been shown to at times, create an overwhelmed source of competition for health promotion marketers. Nowhere is the competition more obvious than in the area of alcohol promotion where advertisers advertise: 1) using much larger budgets (Grube & Wallack, 1994); 2) using a lot higher advertising frequencies (Oddy & Hawks, 1997); 3) with far more appealing promotions (National Expert Authority Committee on Alcohol, 2000); 4) using advertisements that are more interesting and memorable for adolescents (Aitken et al., 1988). With this in mind, it certainly appears that health authorities have a considerable task ahead of them if they are to cut through the clutter and impact of competing pro-alcohol communications.

The majority of adolescents in this study (54 per cent) either strongly agreed or agreed that they felt television advertising was used where products or things are important compared with only 18 per cent of respondents who *strongly disagreed* or *disagreed* with this statement (see Figure 6.21). The respondents also reported that they find products that they like tend to have good advertising, with 48 per cent of respondents indicated that they *strongly agreed* or *agreed* that products that they like tend to have good advertising, compared with only 15 per cent who reported they *strongly disagree* or *disagree* (see Figure 6.22).

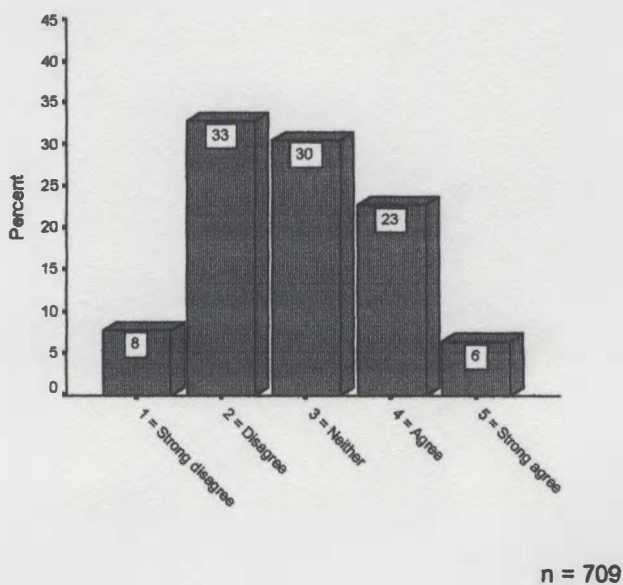


Figure 6.23: I tend to like the product if I like the ad....

The results suggest that respondents tend to be in the general direction of agreement that: 1) they like some advertisements better than others; 2) they take more notice of advertisements they like; 3) they believe products or things that are important tend to use television advertising and; 4) they tend to believe products that they like tend to have good advertising. Of particular interest to this study though is whether respondents believe that their liking of an advertisement will tend to equate to a liking of the product. Only 29 per cent of respondents indicated they *strongly*

agree or *agree* that they tend to like products if they like the advertisement compared with 41 per cent that *strongly disagreed* or *disagreed* with this statement (see Figure 6.23).

This finding is interesting because this response is somewhat contrary to the answers of the questions that were asked previous to this question. The findings to this question flew in the face of the marketing theory into ‘attitude to the advertisement’ that was presented in chapter three. This theory suggested a positive attitude toward the advertisement would lead to positive attitude toward the object. This previous discussion aside, evidence suggests the respondents in this advertisement could have been misreporting their own feelings on this topic, for example adolescents in this study have already reported, in the majority of cases, that they:

- Like some advertisements better than others
- Take notice of advertisements they like
- Believe products that are important tend to have good advertising
- Believe products that they like tend to have good advertising

The information above indirectly suggests that the findings, while interesting and informative, perhaps leave the reader quite confused as to the true affect if any, liking and advertisement is going to have on an adolescent’s feelings toward the product or *attitude to the object*. As a final measure to try and clarify this previous data, both Chi-square and correlations were undertaken to try and determine whether evidence might suggest that it is important that respondents feel positively toward health promotion messages before they will listen and consider them. To do this the data was analysed looking at the respondent’s level of support for health promotion activities or support for health promotion television advertising to determine whether those who were more supportive were also more likely to:

- Feel advertisements on television that talk to people their age about alcohol tend to make a good point

- Notice advertisements on television that talk to people my age about drinking alcohol
- Feel that advertisements on television that talk to people their age about drinking alcohol are relevant to them

Six Chi-square tests were subsequently run but were not of use because the cross tabulations lacked the necessary 20 per cent cell count (less than 5 observed counts in each cell). The correlations did however indicate that a significant positive relationship between feeling positively about health promotion communications and respondent's inclination toward listening to and valuing these communications (see output Table 6.2).

The following summary can be made from these correlations:

- The results of all six cross tabulations were statistically significant at $p = 0.01$.
- The data indicated that as support for health promotion activities or health promotion television advertising increased, so too did level of agreement to *noticing the television advertising, thinking the television advertisements made a good point and thinking the television advertisements were relevant to them*.
- The strength of these relationships were however, weak or moderate at best ranging from 0.128 – 0.366.

The results in Table 6.2 tend to suggest that adolescents whether they are aware of it or not, tended to feel more positively toward binge drinking advertising if they feel more positively about the cause and vice versa. The direction of the relationship has not been determined here.

Table 6.2: Correlations – Feel positively toward health promotion communications and advertising affect on attitudes toward listening to health promotion communications and advertising

Spearman Correlations for Research Question				
Do adolescents need to feel positively toward health promotion messages such as adolescent binge drinking before they will consider listening to them?				
	Cross tabulation	Value	Approx	Sig - F
Approval of the Cause (Ac)	I feel that ads on the TV that talk to people my age about drinking alcohol	0.273	7.531	0.01
Would you support the health authority's attempts to talk to teenagers your age about not drinking too much alcohol?	tend to make a good point			
	When I see ads on TV that talk to people my age about drinking alcohol I tend to take notice	0.282	7.823	0.01
	I feel that ads on TV that talk to people my age about drinking alcohol are relevant to me	0.128	3.237	0.01
Cross tabulation				
Approval of the Ad (Aad)	I feel that ads on the TV that talk to people my age about drinking alcohol tend to	0.351	9.981	0.01
How do you feel about TV ads you see that talk to teenagers your age about not drinking too much alcohol?	make a good point			
	When I see ads on TV that talk to people my age about drinking alcohol I tend to take notice	0.366	10.454	0.01
	I feel that ads on TV that talk to people my age about drinking alcohol are relevant to me	0.165	4.439	0.01

The next section will now review some of the findings from the previous data reporting before then going on to look at their implications of these findings for Health Authorities.

6.3 Summary - Adolescents' Attitudes toward Alcohol Restraint Communication

After undertaking the literature review for this study one might be left the impression that adolescents, as a group would feel generally unsympathetic toward health promotion communications that speak to people regarding alcohol restraint. Furthermore, it was expected that adolescents would be even less sympathetic toward this cause when communications were targeted specifically to their adolescent group. In both of these cases, the findings were in the opposite direction to what was expected. It was found that adolescents are in the majority of cases supportive of those health authority initiatives that advocate alcohol restraint with only 5 per cent of respondents opposing this cause. In particular, they are even more likely to support those restraint communications that target their adolescent peers with only 7 per cent of respondents opposing this cause. The findings were similar where alcohol restraint advertising had only 8 per cent of respondents indicating that they opposed alcohol restraint advertisements that speak to the general community. Furthermore, only 9 per cent of adolescents opposed alcohol restraint advertising targeted at their age group specifically versus 47 per cent supporting advertising aimed at their age grouping.

Of interest here was the data that suggested that while adolescents do support alcohol restraint communications targeted at their age group, their level of support is dampened if those communications are targeted at *them as individuals* rather than their *peers*. It was noted that where questionnaire questions implied that the respondent was getting benefit from the advertisement or the advertisement was important to them, their level of support dropped. The signal that was perhaps being communicated here was that adolescents believed they could be trusted with alcohol but their peers could not.

Further to this theme, adolescents were asked their level of support for nine different health authority initiatives to reduce adolescent binge drinking. Six out of the nine initiatives were opposed, for example suggestions such as *raising the legal drinking age, increasing the price of alcohol, reducing the number of places that sell alcohol* were all very strongly opposed. Other suggestions such as *banning alcohol sponsorship of sport and sporting teams, educating people to **stop** drinking altogether and limiting television alcohol advertisements until after 9.30pm* were all moderately opposed. Those initiatives that were supported were: 1) Education; 2) Increase penalties to those who sell alcohol to underage drinkers; 3) Increase the number of alcohol free events. Similarly, where adolescents were asked to allocate spending over three different health alcohol restraint initiatives *education* was the preferred option over *treatment* or *law enforcement*.

These findings seem to suggest that adolescents do not want their social and consumer environment to be changed in any way that might restrict their access to alcohol or their use of alcohol. The exception being where the storeowners are concerned. Here they support penalising the seller of alcohol but they do not want any penalties placed on adolescents for buying the alcohol. Adolescents also support further education about alcohol misuse. They appear to be asking here for an environment where they have information, but no restrictions on the choices in their lives. They are perhaps saying that they want to have choices and the freedom to make these choices.

Another research objective that has just been explored involved trying to ascertain whether adolescents need to feel positively toward a cause before they will think about listening to it (and adopting the prescribed behaviour). This question was thought to be of interest because general marketing theory believed that a positive attitude toward an advertisement would lead to a greater intention to act. This study therefore attempted to make investigate whether a positive attitude toward the cause of reducing alcohol misuse might have an influence on an individual's intention to listen to the prescribed behaviour. To this end, a number off questions were asked to try and infer whether adolescents were likely to be influenced by their

approval of a cause such as adolescent alcohol restraint and by the advertising health promotion planners produce in response to this cause.

The results indicated that the majority of respondents like some advertisements better than others (92 per cent) and they take notice of advertisements they like (96 per cent). The majority of adolescents (54 per cent versus 18 percent) reported that they believed that products and things that are of interest to them tend to use television advertising. Similarly, the majority of respondents (48 per cent versus 15 percent) reported that products they like tend to have good advertising. However in clear conflict with these previous findings, the majority of respondents (38 per cent versus 29 per cent) indicated that they do not tend to like the product because they like the advertisement. Why the results here were so different to the results on the previous two questions was unclear.

In other findings, respondents indicated that they found alcohol restraint advertising to be boring when compared to six other categories of advertising they could choose from. Probably the most important piece of evidence as to any relationship between *attitude to the alcohol restraint cause and adolescent intentions to listen to the messages from that cause* comes from doing a Pearson's R correlation. This test measured for relationship between the variables and where any relationship may exists it measures for strength between those variables. It was found that those that are supportive of the cause or its advertising report that they are *also more likely to take notice of alcohol restraint messages, think they are relevant to them, and think these communications make a good point*. This relationship was found to be at a level of $p = 0.01$ and all measures of the relationship were rather weak ranging between 0.165 – 0.366.

So in conclusion, evidence has been presented in this chapter that has suggested that it does seem important that respondents feel positively toward health promotion messages before they will listen and consider them. Both anecdotal evidence and more direct evidence in the form of the correlations have suggested that a positive attitude toward the cause does lead to a more positive attitude toward

the advertising message. While the correlation was not strong, those that felt *more positively* toward alcohol restraint communications also felt *more positively* toward the advertisement, saying they believed the advertisements tended to make a good point, were relevant and were noticeable to them.

This finding for this research objective, in itself, has the potential to give health authorities some encouragement in that this evidence does suggest they have the support of many adolescents. Recapping on the material presented in chapter two, Donovan, et al. (1998) and others (NDSHS, 1998) have suggested that where health authority's selected priorities are congruent with community perceptions, the achievement of health promotion campaign objectives will be facilitated. This study has suggested adolescents not only have a generally positive attitude toward health promotion but this positive attitude translates through to greater support for the content of the communications themselves.

After analysing the three research objectives these findings may have significant value in explaining why in this study the punishment advertising execution worked as well as the combination advertising execution. Similarly, these findings might also be significant in explaining why in this study, the punishment advertising execution outperformed the positive advertising execution.

The punishment reinforcement execution might have worked somewhat better than the positive execution style because it broke through the clutter and held its audiences' attention more than the positive approach did. The research that has just been presented has indicated that adolescents are likely to find alcohol health promotions to be the 'least interesting' of most advertising topics therefore any promotion must grab and hold their attention. While both punishment and positive executions were thought to both be very realistic and relevant to the adolescent audience the punishment execution was the confrontational one that demanded the viewers' attention. Perhaps this approach is therefore necessary with any health promotion execution that tries to get through to adolescent audiences on the more *passé* issues such as health promotion.

This consideration must also be put into context where health promotion messages are often competing against the voice of other pro-alcohol messages that can be seen in the popular media and in advertising (Strickland, 1982; Atkin, 1987; Casswell, 1995; Grube, 1995; Slater et al., 1996a; Perry, 1997; Oddy & Hawks, 1997; Wylie, 1997; National Expert Authority Committee on Alcohol, 2000). This study has presented information to suggest that advertising will need to be quite aggressive to be noticed over these stronger and more appealing countervailing messages.

Why the punishment execution worked at least as well as the combination advertising execution is another topic worthy of comment here. As previously mentioned the direct, aggressive and non-compromising method of the punishment advertising execution might have contributed significantly towards the success of the punishment appeal because quite simply, it cut through the clutter and demanded attention. Traditionally, the theory into threat-based advertising suggests that these types of advertisement are effective to a point due to their ability to produce facilitating effects, but only to a point (Ray & Wilkie, 1970). In accordance with the end design of an advertisement, these facilitating effects can however be suppressed or even reversed to the point where the value of threat-based advertising becomes cancelled out by the emergence of inhibiting effects. Authors such as Rogers (1983) and Witte and Allen (2000) have already been used to explain why these inhibiting effects occur and subsequent discussion identified why the combination appeal was expected to outperform the punishment execution.

It will be suggested in this study that the most likely reason that combination execution did not rate any more favourably with the respondents than the punishment execution is because subsequent data revealed a high level of approval of the cause and its communication. For example, once respondents were impacted by the advertising execution they did not resist the message because they thought it was: relevant to their life experiences and their social environment; the message was accurate and presented in a credible way and; because they believed in the

importance of being able to live in a world that now included frequent alcohol consumption. This theory cannot however, be verified without further study at a later date.

These findings have by no means been exhaustive or necessarily of high sophistication but they have provided some initial information where there was currently very little or none available in the public domain. The next section shall look on the implication of this study on health promotion planners and suggest further research.

6.4 Implications for Health Promotion Marketers and Recommendations for Future Research

This study has suggested that when faced with a decision on how best to communicate to adolescents about alcohol restraint, threat-based executions seem to be a better option than using a positive reinforcement advertising execution. Positive reinforcement just does not appear to have enough motivating influence on adolescents. In contrast, the more threatening approaches such as the punishment execution or the combination executions seem to have the greatest impact on adolescents therefore it might be argued they will in affect be able to facilitate the greatest change in adolescent behaviours. The data in this study were quite clear on this matter as were those passing comments that were often made by the adolescents at the end of many of the data collection sessions. In short, this study would recommend health promotion planners working in the area of adolescent alcohol restraint, should use an advertising execution that is at least in part, threat-based, in preference to advertising using a positive reinforcement advertising execution.

Making managerial recommendations between the combination advertising execution and the punishment advertising execution is a more difficult task though. The evidence here suggests that the punishment advertising execution may have been

marginally better, however these differences were not statistically significant. Marketing theory seemed to perhaps suggest the combination advertising execution would be the superior communication approach but this was not found to be the case here. It has been suggested in the discussion section of this dissertation that the results were as reported because the adolescents unconditionally approved of the cause and therefore were resigned to value in accepting the threatening message.

Further research would be recommended in this area to find out whether approval of a social cause such as adolescent alcohol restraint allows advertisers' greater latitude than they otherwise would have, to increase the level of fear in an advertisement. This future study might therefore, compare two or three differing products using contrasting threat-based advertising executions on each one then a measurement of respondent's evaluations for each advertisement could be taken.

Perhaps the punishment execution rated as well as the more sophisticated combination execution quite simply because that the advertising execution was shorter in duration, less complex and easier to understand. The animatic may have unfairly presented the combination portrayal because it was more complex and longer. The extra slides and narration that were required to get both reinforcements across may have become tedious or confusing even though it did appear to be quite straight forward. If these concepts were crafted by a more professional organisation with access to necessary equipment, people and the money these portrayals may have been more able to measure differences between concepts. Whether there was a real problem with this portrayal or not, is still open to speculation.

This study has presented good evidence to suggest that while adolescents might find alcohol restraint communications to be boring, they do not necessarily feel alienated by this type of advertising. It was found that adolescents appear to be quite supportive of alcohol restraint communications that emphasise the negative rather than the positive. It therefore seems reasonable to suggest that health promotion planners might not need to be overly concerned that adolescents will see their efforts in a negative way. The advertisements that were used in this study,

along with the general questions that were asked prior to seeing these advertisements all appeared to indicate that adolescents can be a quite receptive audience. Further research has already been recommended to strengthen the findings on this topic. To overcome the boredom issue with anti-binge drinking advertising it could be suggested that health promotion planners should use evocative or novel advertising approaches to get through to their adolescent audiences. This might therefore give further support for the use of high-threat advertising executions.

Of extra interest in this study, while adolescents do believe in adolescent alcohol restraint communications they did seem to indicate that they thought that the problem of adolescent alcohol misuse was one that was even more relevant to their peers. This area is one that would be worthy of extra investigation to determine whether this result can be replicated and verified. For example, the lesson that health promotion planners might take away from this finding is that communications might be better couched in language that is less personal, that communicates in a way that talks to the group and not to the individual. To speak to the individual might create some type of psychological noise in the communication channel where the adolescent uses selective attention perception and selective processing of the message and as a consequence, they dismiss the message because it is assessed as not being as relevant to them, or not relevant at all.

As expected, this study suggested adolescents will in most cases, reject restrictions that are placed on them by health authorities. For example, raising the legal drinking age or reducing supply was seen as being non-negotiable. Similarly, an alcohol restraint message is seen as being positive whereas as the abstinence message was considered negative. The degree of negativity to an abstinence message was so pronounced that it perhaps suggested that even those that were not alcohol drinkers were opposed to these communications. This finding reinforces the popular belief in health promotion circles that young people want the power to make their own decision, they want limited restrictions placed on their lives, and the call by older people for younger people to have a zero alcohol intake is unacceptable. Health promotion planners can perhaps therefore continue to craft their

communications referring back to these existing understandings of adolescent culture.

Health promotion planners can take heart in the knowledge that their alcohol restraint messages are widely accepted by adolescents and they are perceived as being worthwhile. Further to this, this study suggested that this higher level of appreciation for these health initiatives does appear to have a weak but significant effect on responsiveness to listen to and value the health authorities prescribed behaviour. This finding suggests health promotion planners need to consider not only the elements of their next health campaign but also how they can boost public acceptance of that campaign before, during and after the launch of these campaigns. Initiatives such as public launches, press opportunities, sponsorship of events and public speaking might all assist in this task. All of these initiatives might help to raise community support for the cause and thereby doing so, boost the receptiveness to the prescribed behaviour.

In the preliminary data analysis it was noted that more young girls tend to describe themselves as drinkers than boys. These girls also tended to report that they drink as often as boys and drink at *hazardous* levels as much as boys. When the National Health and Medical Research Council (NHMRC) guidelines are factored into these female consumption levels this suddenly elevates many of the girls into harmful drinking ranges. These guidelines suggest that once issues of body weight, fat concentration and metabolism are factored in, women *should* drink quite a lot less than men, for example 1 – 2 standard drinks per day, compared with 2 – 3 standard drinks for men suggest the NHMRC. Therefore when using NHMRC guidelines, girls' drinking appears to be more problematic than is the case for boys. Exploring methods of addressing these excessive consumption levels in girls may be an exercise in pre-emptive research that assist might health authorities to accumulate sufficient knowledge to address this issue.

6.6 Limitations of this Study

This section of this dissertation now looks at any limitation of this study that may have influenced its outcome and ultimately the validity of the results. The sheer size of the sample and the efforts that were made to remove any extraneous or confounding affects on the study all have contributed to what is believed to be the collection of good quality data. There however were areas of this study that may have constituted design weaknesses. Some of the limitations of this study were inherent in its design whereas others emerged as the study unfolded. In hindsight some of the problems that arose perhaps could have been engineered out of this study while others could not. For example limitations may have been difficult to avoid due to the difficulty of working with: 1) adolescent test subjects; 2) school settings; 3) time constraints; 4) technical and funding constraints. These limitations will be discussed in the pages to follow.

The stimuli for this study were three different alcohol portrayals that were presented in animatic form using a VHS tape and video player. While these stimulus videos were thought to be very effective they were by no means up to the standard of other commercial presentations that adolescent audiences were accustomed to seeing. The following areas that could have been improved in these animatics include:

- Better voice-overs and dialogue
- More suitable frames with clearer depictions of each of the executions
- More frames and movement

Unfortunately, access to the people, equipment and funding to develop a better quality set of portrayals was not possible for this study. In an effort to minimise the shortcomings of these advertising portrayals an explanation was given to the

adolescent respondents before seeing the animatic. It was explained that these advertisements were only concepts rather than badly finished advertisement. It was noted that when an explanation about the quality of the creative was not forthcoming the adolescents would be openly critical of the quality of the creative. Once the idea of an advertising concept or a storyboard was explained the respondents became interested in the portrayal as part of the overall process of making advertisements.

Another limitation of the animatic that was used might be that it was based on a campaign that had been run in Perth the previous summer. While students did not mention that they recognised the advertisements they may perhaps have been inadvertently influenced by previous exposure to these advertisements.

There may have also been some issues regarding the respondents themselves that need to be considered for examples these problems might have:

- Been tired, unwell, were disruptive or disrupted
- Lacked the ability to do the questionnaire properly, perhaps for example they had a learning disability or a literacy deficit
- Lacked goodwill, where they were antagonistic towards researchers or perhaps they may have just been annoyed because they were asked to fill out a questionnaire
- Copied responses from a neighbour or answered questions in a way that would be approved of by a neighbour who looked across at his or her answers
- Put little or no effort into filling out the questions, thus their responses were indiscriminate - where respondents were not responding using their true feelings

All of these issues were worthy of concern even if they were not made apparent by the respondents during the data collection phase of this study. Going beyond these inherent sample limitations there may lay a number of other limitations to this study. Again, these limitations may not necessarily have been immediately apparent in the design of this study but nevertheless they still need to be recognised and briefly discussed. Some of these issues include:

- There has been only limited previous conceptual work done in the area of communicating to adolescent regarding the misuse of alcohol. Therefore, the study was designed without the luxury of having a base of other related studies to build from. To reduce the impact of this lack of information a comprehensive literature review was undertaken of materials that were thought to be related to the topic. As a consequence, the researcher was then able to acquire a greater understanding of the topic and thereby anticipate the best approach to take when designing the study (see chapters 2 and 3).
- The adolescent respondents may have purposely or inadvertently on seeing the advertising stimuli, recorded responses on the questionnaire that were more reflective of their positive or negative attitudes and feelings towards particular creative components of the advertisement rather than the scoring the *overall* advertising approach. For example, they may have been focusing their attention on the *actors in the portrayal, or the music, or the order of presentation* of the advertisements rather than the overall message in the communications.

To try and overcome the effects of these types of distractions the following procedures were adopted: 1) Youthful actors and voiceovers of youthful people were incorporated into the advertising; 2) appropriate music and ambient sounds were incorporated into the animatic for example, audio was collected at night in the streets and clubs of Northbridge; 3) the order of the advertising presentations was rotated from school class to school class.

- More comprehensive pre-testing of the questionnaire needed to be done. Frazer and Lawley (2000) suggested a three phase pre-testing be used but this did not occur due to time constraints. The study needed to be conducted before the end of the approaching school year. In the case of this study, only two of the three stages were carried out.

As a consequence of this, the questionnaire in this study had three errors that comprised one set of four questions that had an error of logic and then there were two others questions that were in hindsight, a bit ambiguous for some respondents. In the case of the set of four questions where logic was a problem, these questions were not analysed because they were ultimately thought to be unnecessary to the study and the exclusion of these questions had no bearing on the eventual results of this study. The questions where ambiguity may have been a problem were addressed in the data collection phase of the study by proffering additional explanations to respondents regarding the intentions of these questions. In addition to this, when more questionnaires were reprinted these new questionnaires were revised.

- While observations have been drawn from the findings of this study this does not necessarily mean these findings will be automatically predictive of adolescent attitudes to anti-binge drinking promotion, anti-binge drinking advertising, or specific anti-binge drinking advertising reinforcements. Lutz (1985) believes that there is considerable evidence to suggest A_{ad} influences brand attitudes in pre-test situations but no evidence that it operates in a naturalistic exposure setting (p.60). There is no background research on this health promotion topic or with this adolescent sample frame to suggest A_{ad} findings in this pre-test type study will in reality translate to adolescent attitudes toward the brand or message in a naturalistic setting.

- The theoretical framework is based on studies done on consumer goods, which may not be totally applicable to a liking of an advertisement, attitude toward a health promotion, or attitude toward adopting the recommended behaviour.
- Some product categories are liked more by consumers such as food and beverage, and are therefore are scored higher in studies whereas others are less likeable, such as medicine, personal care and household products that are more likely to be rated neutral in studies suggests Biel (1990, p.23). Binge drinking advertisements may be considered to be boring by adolescents and as a consequence they will be considered to be less likeable in any advertising evaluations that might take place. To try and overcome this problem the advertisements were made as relevant as possible using “slice-of-life” depictions. These slice-of-life depictions tend to be very relevant to the audience and as a consequence, they are seen as being more involving.

To conclude this section it must be said that while there were some limitations to this study there were certainly many more positives. This research design that has been presented in this dissertation did work well in any number of ways. For example, the study did capture a large amount of information that accurately addressed the area of interest. The respondents cooperated with the study and seemed to cope well with the study in spite of its reasonably high degree of complexity and its length. The study unfolded smoothly in a way that made it feasible to all parties concerned. The study was cost effective and included a broad spread of respondents from many different socio-demographics and metropolitan regions.

No matter what design was ultimately devised to do a study of this type there was always going to be strengths and weaknesses with any approach. This does not necessarily mean a study of this type should therefore be abandoned. Collecting data from this adolescent group on this subject was certainly still worthy of effort. This type of research had as its intention to try and assist health promotion planners to make more accurate decisions with regards their future design of their anti-health

promotion initiatives that target young people. A study of this type has as its intention to generate information that will at best only lend support toward future decision making rather than to supply irrefutable evidence that will remove error from all future decision making. No one study therefore is likely to result in a comprehensive cache of information that will in one strike, address the myriad of problems associated with communicating to adolescents about alcohol restraint.

With this in mind, the findings in this study did appear to indicate that the adolescent respondents were generally reasonably receptive to the idea of health promotion authorities speaking to adolescents about the issue of alcohol restraint. The data also suggested that they feel that television is an appealing advertising medium for them that carried considerable prestige and weight for them. They also indicated general agreement that television advertisements that communicated to them about alcohol restraint did tend to make a good point. Of special interest to this study were the three hypotheses. The data did appear to indicate certainly in this case, that the punishment and combination advertising executions were significantly most effective than the non-threatening positive advertising execution. However contrary to the stated hypothesis, there was no significant difference between the effectiveness of the punishment versus the combination advertising execution styles.

In conclusion, the methodology and other design components of this study have served their purpose quite adequately. This research design has succeeded in gathering data that has ultimately contributed to the addition of just one more building block in the weight of ever increasing knowledge within this subject area.

7.0 – Reference Page

- Adlaf, E., & Kohn, P. (1989). Alcohol advertising, consumption and abuse: A covariance-structured modelling look at Strickland's data. *British Journal of Addiction*, 84, 749-757.
- Aitken, P., Eadie, D., Leather, R., McNeill, R., & Scott, A. (1988). Television advertisements for alcoholic drinks *do* reinforce under-age drinking. *British Journal of Addiction*, 83, 1399-1419.
- Anand Keller, P., & Goldberg Block, L. (1996). Increasing the persuasiveness of fear appeals: The effect of arousal and elaboration. *Journal of Consumer Research*, 22(March), 448-463.
- Andreasen, A., & Belk, R. (1979). Consumer response to arts offerings: A study of theatre and symphony in four southern cities. In E. MacCracken (Ed.), *Research in the Artworld (Walters Art Gallery)* (pp. 13-19). Baltimore.
- Atkin, C. (1987). Alcoholic-beverage advertising: Its content and impact. In e. Holder HD (Ed.), *Advances in Substance Abuse: Behavioural and Biological Research. Supplement 1: Control Issues in Alcoholic Abuse Prevention: Strategies for States and Communities*. (pp. 267-287). Greenwich: Jai Press Inc.
- Atkin, C. (1990). Effects of televised alcohol messages on teenage drinking patterns. *Journal of Adolescent Medicine*, 11, 10-24.
- Atkin, C. (1993). Effects of media alcohol messages on adolescent audiences. *Adolescent Medicine*, 4(3), 527-542.
- Atkin, C. (1995). Survey and experimental research on effects of alcohol advertising. In Martin, S and Mail, P., eds. (Ed.), *Effects of the mass media on the use and abuse of alcohol* (NIAA Research Monograph (28), NIH Pub. No.95-3743, pp. 39-68). Bethesda, MD: National Institute on Alcohol Abuse and Alcoholism.
- Atkin, C., Hocking, J., & Block, M. (1984). Teenage drinking: Does advertising make a difference? *Journal of Communications*, 34(Spring), 157-167.
- Austin, E., Weintraub, M., & Kay, H. (1994). Effects of interpretations of televised alcohol portrayals on children's alcohol beliefs. *Journal of Broadcasting & Electronic Media*, 38(4), 417-428.

- Austin, E., Weintraub, M., & Kay, H. (1994). Effects of interpretations of televised alcohol portrayals on children's alcohol beliefs. *Journal of Broadcasting & Electronic Media*, 38(4), 417-428.
- Australian Bureau of Statistics. (2002). Household final consumption. *The Commonwealth Government of Australia*, Table 49, Cat.5204.0.
- Australian Bureau of Statistics. (2002). National health survey results. *The Commonwealth Government of Australia*, Cat.4364.0.
- Australian Institute and Health and Welfare. (2002). 2001 National Drug Strategy Household Survey: Detailed Findings. *The Commonwealth Government of Australia*, Cat.PHE-41.
- Bandura, A. (1969). *Principles of behaviour modification*. Stanford University: Holt Rinehart and Winston.
- Belch, G., & Belch, M. (2001). *Advertising & promotion: An integrated marketing communications perspective* (5th ed.). San Diego State University: McGraw-Hill Irwin.
- Belch, G., & Belch, M. (2003). *Advertising & promotion: An integrated marketing communications perspective* (6th ed.). San Diego State University: McGraw-Hill Irwin.
- Berger, A. (1962). Conditioning through vicarious instigation. *Psychological Review*, 69(5), 450-466.
- Bergiel, B., & Trosclair, C. (1985). Instrumental learning: Its application to consumer satisfaction. *The Journal of Consumer Marketing*, 2(4, Fall), 23-28.
- Biel, A. (1990). Love the ad. Buy the product? *ADMAP*, September, 21-25.
- Blaum, P., & Fong, V. (2001). Government bans on TV, radio ads for alcohol do not reduce alcohol consumption. *Penn State News*, October 5.
- Block, L., & Keller, P. (1998). Beyond protection motivation: An integrative theory of health appeals. *Journal of Applied Social Psychology*, 28(17), 1584-1608.
- Boush, D., Friestad, M., & Rose, G. (1994). Adolescent scepticism toward TV advertising and knowledge of advertising tactics. *Journal of Consumer Research*, 21(1), 165-176.
- Boutlis, P. (1999). Fear & loathing in Adland. *Marketing and eBusiness*, April, 22-26.

- Boyd, G., Howard, J., & Zucker, R. (1995). *Alcohol problems among adolescence: Current directions in prevention research*. Hillsdale, New Jersey.: Lawrence Erlbaum Associates, Publishers.
- Brace, N., Kemp, R., & Snelgar, R. (2000). *SPSS for Psychologists: A guide to data analysis using SPSS for Windows (Versions 8, 9, 10)* (1). London: Palgrave.
- Brand, J., & Greenberg, B. (1994). Commercials in the classroom: The impact of Channel One advertising. *Journal of Advertising Research*, 34(1), 18.
- Braungart, R. (1980). Youth movements. In J. Adelson (Ed.), *Handbook of Adolescent Psychology* (pp. 560-598). Brisbane: John Wiley & Sons.
- Broadbent, R. (1994). "Not a problem:" Young people's perceptions of their use and abuse of alcohol. *Youth Studies Australia, Spring*, 32-35.
- Brown, B. (1990). Peer groups and peer cultures. In S. Feldman & G. Elliott (Eds.), *At the threshold: The developing adolescent* (pp. 171-196). Cambridge, Massachusetts: Harvard University Press.
- Burke-Chapman, M., & Edell, J. (1989). The impact of feelings on ad-based affect and cognition. *Journal of Consumer Research*, 26, 68-83.
- Burns, A., & Bush, R. (1998). *Marketing research*. Sydney: Prentice Hall of Australia.
- Burns, S., & Thompson, C. (1998). Developing a youth alcohol education message for school-aged adolescents. *Health Promotions Journal of Australia*, 8(2), 109-114.
- Burton, S., & Lichtenstein, D. (1988). *The effect of ad claims and ad context on attitude toward the advertisement*. Paper presented at the Journal of Advertising, 17, 1, 3-11.
- Carlson, L., Grossbart, S., & Stuekel, K. (1992). The role of parental socialisation types on different family communication patterns regarding consumption. *Journal of Consumer Psychology*, 1(1), 31-52.
- Carroll, T. (1995). *National initiative in drug education. The communication challenge for drug educators: Public communications strategy*. Sydney: Commonwealth Department of Human and Health Services.
- Carroll, T., Lum, M., Taylor, J., & Travia, J. (2000). *Evaluation of the launch phase of the national alcohol campaign summary research*. Sydney: Research and Marketing Group - Population Health Division.
- Casswell, S. (1995a). Does alcohol advertising have an impact on public health? *Drug and Alcohol Review*, 14, 395-404.

- Casswell, S. (1995b). Pubic discourse on alcohol: Implications for public policy. In H. Holder & G. Edwards (Eds.), *Alcohol and public policy: Evidence & issues* (pp. 190-211): Oxford University Press.
- Chapa, M. (2001). *Operant conditioning: How reinforcement and punishment affects children*. Retrieved 30 May, 2002, from www.hwi.com/tygger/edpsych/behavioral/operant.html
- Cohen, D., Richardson, J., & LaBree, L. (1994). Parenting behaviors and the onset of smoking and alcohol use: A longitudinal study. *Paediatrics*, 94(3 September), 368-369.
- Coleman, J. S. (1961). *The adolescent society: The social life of the teenager and its impact on education*. New York: Collier-Macmillan Limited.
- Collins, J., & Thomas, N. (1982). *Age and susceptibility to same sex peer pressure*. Paper presented at the British Journal of Education Psychology, 42, pp.83-85.
- Commonwealth Government. (1998). *National Drug Strategy Household Survey: Survey Report 1998*. Canberra: Australian Institute of Health and Welfare.
- Commonwealth Government. (2001). *National Drug Strategy Household Survey: Survey Report 2001*. Canberra: Australian Institute of Health and Welfare.
- Commonwealth Government. (1998). *The National Alcohol Action Plan, 1995 – 1997*: Commonwealth Department of Health and Family Services. National Health Promotion and Protection Branch.
- Commonwealth Government. (2002). *Media kit - Drinking: Where are your choices taking you?* Retrieved 14 September, 2002
- Connolly, G., Casswell, S., Zhang, J., & Silva, P. (1994). Alcohol in the mass media and drinking by adolescents: A longitudinal study. *Journal of Addiction*, 89(1255-1263).
- Costanzo, P. (1970). Conformity Development as a Function of Self-Blame. *Journal of Personality and Social Psychology*, 14, 366-347.
- Cox, A., & Cox, D. (1998). Beyond "peer pressure:" A theoretical framework for understanding the varieties of social influence in adolescent risk behaviour. *Paper presented at the Innovations in Social Marketing Conference*, Washington DC.
- Davey, J. (1994). Young women & drinking. *Paper presented at the Youth Studies Australia*, Spring, 28-31.

- Directorate of School Education. (1994). *Drug Education Strategic Plan: 1994–1999*. Melbourne: Directorate of School Education.
- Donovan, R., Homan, J., Corti, B., & Jalleh, G. (1998). Community perceptions of health promotions priorities for Western Australia. *Health Promotion Journal of Australia*, 18(3), 202-204.
- Dubow, J. (1995). Advertising recognition and recall by age. *Journal of Advertising Research*, 35(5), 55-60.
- Dufour, M. (1996). Risks and benefits of alcohol use over the life span. *Alcohol Health and Research World*, 20, 141-151.
- Edell, J., & Chapman-Burke, M. (1987). The power of feelings in understanding advertising effects. *Journal of Consumer Research*, 14(December), 421-433.
- Elkind, D. (1967). Egocentrism in adolescence. *Journal of Child Development*, 38, 1025-1034.
- Elkind, D. (1978). *The child's reality: Three developmental themes*. Sydney: Lawrence Erlbaum Associates, Publishers.
- Elliott, G., & Feldman, S. (1990). *Capturing the adolescent experience* (The developing adolescent ed.). Massachusetts: Harvard University Press.
- Elliott, S & Shanahan, P. (1999). Drinking. Where are your choices taking you? *Media Kit*, Retrieved 22 December, 2000 from Commonwealth Government, Online, www.health.gov.au/pubhlth/alcoholcampaign/resource/2medsumm).
- Fazio, R., Lenn, T., & Efrein, E. (1984). Spontaneous attitude formation. *Journal of Social Cognition*, 2(3), 217-234.
- Fedler, F., Phillips, M., & Raker, P. (1994). Network commercials promote legal drugs: Outnumbering anti-drug PSA's 45-to-1. *Journal of Drug Education*, 24(4), 291-302.
- Fine, G., Mortimer, J., & Roberts, D. (1990). Leisure, work, and the mass media. In S. Feldman & G. Elliott (Eds.), *At the Threshold: The Developing Adolescent* (pp. 225-254): Harvard Press.
- Ford, S. (1996). Matching drink for think. *The Bulletin*, December 24, 26-27.
- Frazer, L., & Lawley, M. (2000). *Questionnaire design & administration*. Queensland: John Wiley and Sons.
- Friedman's Test. (2002). Retrieved 16 April, 2002 [on-line]. Available from www.texasoft.com/winkfrie.html

- Goldman, L., & Stanton, A. (1998). Evaluation of anti-smoking advertising campaigns. *Journal of the American Medical Association*, March 11(279), 772-785.
- Goleman, D. (1995). *Emotional intelligence*. London: Bloomsbury Publishing.
- Gollan, J. (2001). *Lecture: Behavioral and cognitive-behavioral frameworks*. Retrieved 28 May, 2002, from psuchopath.bsd.uchicago.edu/lecture01-behcog-gollan.htm - 21k
- Gossop, M. (1996). *Living with drugs*. 4th ed. Aldershot, England.
- Grube, J. (1993). Alcohol portrayals and alcohol advertising on television. *Journal of Alcohol Health & Research World*, Winter, 17(1), 61-70.
- Grube, J., & Wallack, L. (1994). Television beer advertising and drinking knowledge, beliefs, and intentions among schoolchildren. *American Journal of Public Health*, 84(2), 254-259.
- Hair, J., Anderson, R., Tatham, R., & Black, W. (1998). *Multivariate data analysis*. New Jersey: Prentice Hall.
- Hanlock, L., Watch, R., Henry, D., Redman, S., & Sanson-Fisher, R. (1995). Drug use in Australia: A community prevalence study. *Medical Journal of Australia*, 156, 759-763.
- Health Promotion Services. (1995). *How peer group influences adolescence alcohol consumption* (Bulletin Number 3). Perth: The Office of Alcohol and Other Drugs: Health Department of Western Australia.
- Health Promotion Services. (1996). *Health Department of Western Australia* (HP4863). Perth: Health Department of Western Australia: Office of Alcohol & Other Drugs.
- Health Promotion Services. (1996a). *Alcohol use by Western Australia school students. 5th Australian School Students' Alcohol and Drugs (ASSAD) National Survey*. Perth: Health Department of Western Australia.
- Health Promotion Services (1996b). *Adolescent perceptions, beliefs and attitudes towards alcohol consumption* (Bulletin 8). Perth: Alcohol & Other Drugs: Health Department of Western Australia.
- Health Promotion Services. (1996c). *1995 rural alcohol campaign* (Bulletin Number 1). Perth: Health Department of Western Australia: Office of Alcohol and Other Drugs.

- Health Promotion Services. (1996d). *Adolescent attitudes towards alcohol consumption* (Bulletin 4). Perth: Alcohol and Other Drugs, Health Department of Western Australia.
- Health Promotion Services. (1997a). *Alcohol consumption among those aged 18 to 34 Years* (Bulletin 6). Perth: Health Department of Western Australia: Office of Alcohol & Other Drugs.
- Health Promotion Services. (1997b). *History of alcohol* (HP5981). Perth: Health Department of Western Australia: Office of Alcohol & Other Drugs.
- Health Promotion Services. (1997c). *Alcohol* (HP623). Perth: Health Department of Western Australia: Office of Alcohol & Other Drugs.
- Health Promotion Services. (1997d). *Alcohol and young people – Aged 12 to 17: Alcohol fact sheets for professionals* (HP4843). Perth: Alcohol and Other Drugs Program, Public Health Division.
- Health Promotion Services. (1997e). *Alcohol and health in Western Australia: A resource book*: Western Australian Health Department.
- Health Promotion Services. (1997f). *Health and social consequences of alcohol Consumption: Alcohol fact sheets for health professionals* (HP5159). Perth: Health Department of Western Australia: Alcohol and Other Drugs Program.
- Health Promotion Services. (1998a). *The 100% Control - Respect Yourself campaign - 1997/98 phase*. Perth: Health Department of Western Australia: Office of Alcohol & Other Drugs.
- Health Promotion Services. (1998b). *How parents influence adolescents alcohol consumption* (Bulletin 2). Perth: Alcohol and Other Drugs: Health Department of Western Australia.
- Health Promotion Services. (1998c). *Illicit drug use by Western Australian school students in 1996* (Bulletin 13). Perth: Alcohol and Other Drugs Program: Health Department of Western Australia.
- Health Promotion Services. (1998d). *Respect yourself campaign summary*. Perth: Health Department of Western Australia.
- Health Promotion Services. (1999a). *Alcohol and the law* (HP5974). Perth: Health Department of Western Australia: Office of Alcohol & Other Drugs.
- Health Promotion Services. (1999b). *Think Before You Drink - 1999 campaign summary*. Perth: Health Department of Western Australia.
- Health Promotion Services. (1999c). *Regrettable behaviours* (HP5977). Perth: Health Department of Western Australia: Office of Alcohol & Other Drugs.

- Health Promotion Services. (1999d). *What is a standard drink?* (HP0584). Perth: Health Department of Western Australia.
- Health Promotion Services. (1999e). *Here's to your health: A guide to reducing your alcohol consumption* (32 ed., HP6590). Perth: Health Department of Western Australia: Office of Alcohol & Other Drugs.
- Health Promotion Services. (2000a). *Think Before You Drink - 2000 campaign summary*. Perth: Health Department of Western Australia: Office of Alcohol & Other Drugs.
- Health Promotion Services. (2000b). *Your teenager and alcohol* (HP6492). Perth: Health Department of Western Australia.
- Henley, N. (2001). Edith Cowan University. Personal Communication, 28 November.
- Henthorne, T., LaTour, M., & Natarajan, R. (1993). Fear appeals in print advertising: An analysis of arousal and ad response. *Journal of Advertising*, 22(2), 59-68.
- Huitt, W., & Hummel, J. (July 3, 1997). *Operant (instrumental) conditioning*. Retrieved 30 May, 2002, from www.chiron.valdosta.edu/whuitt/col/bethsys/operant.html
- Interpreting Friedman's test. (2002). Retrieved 16 April, 2002 [on-line]. Available from www.graphpad.com/articles/interpret/ANOVA/friedmans
- Jackson, C., Henriksen, L., & Dickinson, D. (1999). Alcohol-specific socialization, parenting behaviors and alcohol use by children. *Journal of Alcohol Studies*, May(3), 362-372.
- Jessor, R., & Jessor, S. (1977). *Problem behavior and psychosocial development: A longitudinal development*. New York: Academic Press.
- Jones, S., & Donovan, R. (2001). Messages in alcohol advertising targeting to youth. *Australian and New Zealand Journal of Public Health*, 25(2), 126-131.
- Kandel, D. (1986). *Processes of peer influences in adolescence*. Columbia University, Springer-Verlag Berlin Heidelberg.
- Katz, D. (1960). The functional approach to the study of attitudes. *Public Opinion Quarterly*, Summer, 24, 163-204.
- Kelly, K., & Edwards, R. (1998). Image advertisements for alcohol products: Is there appeal associated with adolescents' intention to consume alcohol. *Adolescence*, Spring 33(129), 47-57.

- Khermouch, G., & Green, J. (2001). Buzz Marketing. *Business Week*, pp. 50-56
- Kleiber, D., & Rickards, H. (1985). Leisure and recreation in adolescence: Limitations and potential. In M. Wade & C. Thomas (Eds.), *Constraints on leisure* (pp.289-317). Springfield Illinois.
- Kotler, P., & Roberto, E. (1989). *Social marketing: Strategies for changing behaviour*. New York: The Free Press: A division of Macmillan Inc.
- LaTour, M., & Rotfeld, H. (1997). There are threats and (maybe) fear caused arousal: Theory and confusions of appeals to fear and fear arousal itself. *Journal of Advertising*, 16(3), 46-50.
- Leong, E. (2001). Edith Cowan University. Personal Communication, 15 September.
- Lilley, B. (1995). Drink. drunk. The difference is drastic. *Marketing*, September, 32-33.
- Linn, M., de Benedictis, T., & Delucchi, K. (1982). Adolescent reasoning about advertisements: Preliminary investigations. *Child Development*, 53, 1599-1613.
- Linn, M., Delucchi, K., & de Benedictis, T. (1984). Adolescent reasoning about advertisements: Relevance of product claims. *Journal of Early Adolescence*, 4(4), 371-385.
- Looft, W. (1971). Egocentrism and social interaction in adolescence. *Adolescence*, 6(Winter), 486-493.
- Lutz, R. (1985). Affective and cognitive antecedents of attitude toward the ad: A conceptual framework. In N. Alwitt & A. Mitchell (Eds.), *Psychological processes and advertising effects: Theory, research and applications* (pp.45-65). Hillsdale, NJ: Lawrence Erlbaum Associates.
- MacDonald, J. (1999). Drug education: Past approaches & future possibilities. *Journal of Youth Studies*, 18(1), 11-15.
- Machleit, K., & Wilson, R. (1988). Emotional feelings and attitude toward the advertisement: The roles of brand familiarity and repetition. *Journal of Advertising*, 17(3), 27-35.
- MacKenzie, S., & Lutz, R., & Belch, G. (1986). The role of attitude toward the ad as a mediator of advertising effectiveness: A test of competing explanations. *Journal of Marketing Research*, May, 23, 130-143.

- MacKenzie, S., & Lutz, R. (1989). An empirical examination of the structural antecedents of attitude toward the ad in an advertising pretesting context. *Journal of Marketing*, 53(April), 48-65.
- Makowsky, C., & Whitehead, P. (1991). Advertising and alcohol sales: A legal impact study. *Journal of Studies on Alcohol*, 52(6), 555-567.
- Malhotra, N., Hall, J., Shaw, M., & Crisp, M. (1996). *Marketing research: An applied orientation*. Sydney: Prentice Hall.
- Mangleburg, T., & Bristol, T. (1998). Socialization and adolescents' scepticism toward advertising. *Journal of Advertising*, 27(3), 11-21.
- Manis, F., Keating, D., & Morrison, F. (1980). Developmental differences in the allocation of processing capacity. *Journal of Experimental Child Psychology*, 19, 156-169.
- Mann, L., Harmoni, R., & Power, C. (1989). Adolescent decision-making: The development of competence. *The Journal of Adolescence*, 12, 265-278.
- Martin, B. (1997). Drowning in numbers. *Bulletin*, December 9, 23-25.
- Mathers, C & Stevenson, C. (1999). *The burden of disease and injury in Australia*. Australian Institute of Health and Welfare, Canberra.
- Mayer, R., & Belk, R. (1982). Acquisition of consumption stereotypes by children. *Journal of Consumer Affairs*, 16(2), 307-321.
- McCallum, T. (1994). Who Influences adolescents? *Youth Studies Australia* (Spring), 36-41.
- Midford, R., Farrington, F., & McBride, N. (1996). Youth perceptions of harm related to alcohol use. Paper presented at the Australian Drug Foundation. Reducing the risk: The risk reduction approach to alcohol education. Australian Drug Foundation.
- Miller, C. (1994). Phat is where it's at for today's teen market. *Marketing News*, August 15, 6.
- Mitchell, A. (1986a). The effect of verbal and visual components of advertisements on brand attitudes and attitude toward the advertisement. *Journal of Consumer Research*, 13(June), 12-24.
- Mitchell, A. (1986b). The effects of visual and emotional advertising: An information-processing approach. In-text *Advertising and Consumer Psychology* (pp. 197-217).

- Mizerski, R. (1995). The relationship between cartoon trade character recognition and attitude toward product category in young children. *Journal of Marketing*, 59(4), 58-73.
- Mizerski, R., & White, D. (1986). Understanding and using emotions in advertising. *Journal of Consumer Research*, 3(4), 57-69.
- Mizerski, K. (2001). Edith Cowan University. Personal Communication, 21 September.
- Montonen, M. (1997). Educational approaches. *Journal of Addiction*, 92(March), 121-125.
- Moore, R., & Moschis, G. (1978). Teenagers reactions to advertising. *Journal of Advertising*, 4, Fall, 24-30.
- Moschis, G. (1987). Consumer socialization: A life-cycle perspective. Lexington Books.
- Moschis, G., & Churchill, G. (1979). An analysis of the adolescent consumer. *Journal of Marketing*, 43(Summer), 40-47.
- Moschis, G., & Moore, R. (1979). Decision making among the young: A socialization perspective. *Journal of Consumer Research*, 6(September), 101-112.
- Moschis, G., & Moore, R. (1982). A longitudinal study of television advertising effects. *Journal of Consumer Research*, 9(December), 279-287.
- Mosher, J. (1994). Alcohol advertising and public health: An urgent call for action. *American Journal of Public Health*, 84(1 February), 180-181.
- Muehling, D., & Laczniak, R. (1988). Advertising's immediate and delayed influence on brand attitudes: considerations across message-involvement levels. *Journal of Advertising*, 17(4), 23-34.
- Munro, G. (1997). School-based drug education: Realistic aims or certain failure. Melbourne: Australian Drug Foundation.
- Murry, J., Lastovicka, J., & Singh, S. (1992). Feeling and liking responses to television programs: An examination of two explanations. *Journal of Consumer Research*, 18(March), 441-451.
- Murry, J., Stam, A., & Lastovicka, J. (1993). Evaluating an anti-drinking and driving advertising campaign with a sample survey and time series intervention analysis. *Journal of American Statistical Association*, 88(March), 50-57.

- National Alcohol Strategy. (2003). *Alcohol and young people (up to 18 years)*. Canberra: Commonwealth Government, June 2003, Fact Sheet 10.
- National Drug Research Institute. (1999). *The public health, safety and economic benefits of the Northern Territory's living with alcohol program 1992/3 to 1995/6*, Perth.
- National Health and Medical Research Council. (2000). *Australian drinking guidelines: Consultation draft*. Canberra: Commonwealth Government.
- National Export Advisory Committee on Alcohol. (2000). *Alcohol in Australia: Issues and strategies* (Draft): National expert committee on alcohol.
- National Institute of Alcohol Abuse & Alcoholism. (1998). *10th special report to the U.S. congress on alcohol and health*. Rockville, MD: National Institute on Alcohol Abuse and Alcoholism.
- National Institute of Alcohol Abuse & Alcoholism. (2000). Latest approaches to preventing alcohol abuse and alcoholism. *Alcohol Research and Health*, 24(1), 42-50.
- New South Wales Health Department. (1993). *NSW youth alcohol strategy: Drug and alcohol directorate*. (Health Publication Number: (DAD)).
- New South Wales Tourism Bureau. (1999). *A short history on Sydney*, 2001, from www.sydneyaustralia.net/tourism/sydney/history/sydhist1.html
- Nisbett, R., & Ross, L. (1980). *Human inference: Strategies and shortcomings of social judgment*. Englewood Cliffs, N.J.: Prentice-Hall.
- Noe, F. (1969). An instrumental conception of leisure for the adolescent. *Adolescence*, 4, 385-400.
- Oddy, W., & Hawks, D. (1997). Drugs and the media: A Western Australian perspective. *Health Promotions Journal of Australia*, 7(3), 165-168.
- Ogborne, A., & Smart, R. (1980). Will restrictions on alcohol advertising reduce alcohol consumption. *The British Journal of Addiction*, 75, 293-296.
- Pagano, R. (1983). *Understanding statistics in behavioural sciences* (2 ed.). Los Angeles: West Publishing Company.
- Parsons, P., Rissel, C., & Douglas, W. (1999). Alcohol portrayals in Australian prime time television in 1990 and 1997. *Australian and New Zealand Public Health*, 23(1), 67-71.

- Patton, G., Hibbert, M., Rosier, J., Carlin, B., Caust, J., & Bowers, G. (1995). Patterns of common drug use in teenagers. *The Australian Journal of Public Health*, 19(4), 393-399.
- Perry, C. (1998). The relationship between "share of voice" and "share of market" and implications for youth health promotion. *Journal of Health Education*, 29(4), 206-212.
- Petty, R., & Cacioppo, J. (1981). *Attitudes and persuasion: Classic and contemporary approaches*. Dubuque, Iowa: Wm. C. Brown Company Publishers.
- Piaget, J. (1957). The child and modern physics. *Scientific America*, 3, 46-51.
- Quigley, L., & Marlatt, A. (1996). Drinking patterns among young adults: Prevalence patterns and consequences. *Journal of Alcohol Health and Research World*, 20(3), 185-191.
- Ray, M., & Batra, R. (1982). Emotion and persuasion in advertising: What we do and don't know about affect. *Advances in Consumer Research*, 3(4, Fall), 57-69.
- Ray, M., & Wilkie, W. (1970). Fear: The potential of an appeal neglected by marketing. *Journal of Marketing*, 34(January), 54-62.
- Ridolfo, B., & Stevenson, C. (2001). The quantification of drug-caused mortality and morbidity in Australia. *Drug Statistics Series, Series*, 7, 32.
- Robertson, T. (1972). The impact of television advertising on children. *Wharton Quarterly*, 6(Summer), 38-41.
- Roedder, D. (1981). Age differences in children's responses to television advertising: An information-processing approach. *Journal of Consumer Research*, 8(September), 144-153.
- Rogers, R. (1983). Cognitive and physiological processes in fear appeals and attitude change: A revised theory of protection motivation. In J. Cacioppo & R. Petty (Eds.), *Social Psychophysiology* (pp. 153-176). New York, NY: Guildford.
- Room, R. (1988). The dialectic of drinking in Australian life: From the Rum Corps to the wine column. *Drug and Alcohol Review*, 12, 305-317.
- Rossiter, J., & Percy, L. (1996). *Advertising communications and promotion management* (2nd ed.). Sydney: McGraw Hill.
- Saffer, H. (1991). Alcohol advertising bans and alcohol abuse: An international perspective. *Journal of Health Economics*, 10, 65-79.

- Saffer, H. (2000). Alcohol consumption and alcohol advertising bans. *Working paper number w7758, June*(1-16).
- Saffer, H. (2002). NIAAA College Drinking Report: Supplemental Abstract. National Bureau of Economic Research, New York
- Savin-Williams, R. (1990). Social interactions of adolescent females and males in natural groups. In H. C. Foote, A, J. Chapman, & J. R. Smith eds., *Friendship and Social Relations in Children*. New York: Wiley, 343-364.
- Schoenbachler, D., & Whittler, T. (1996). Adolescent processing of social and physical threat communications. *Journal of Advertising*, 25(4), 37-54.
- Sexton, D. (2001). Kincumber Senior High School. Personal Communication, 5th October, 2001
- Shanahan, P., & Hewitt, N. (1999). *Developmental research for a national alcohol campaign: Summary report*. Sydney: Elliott and Shanahan Research.
- Sherif, M., & Sherif, C. (1964). *Reference groups: Exploration into conformity & deviation of adolescents*. New York & London: Harper & Row, Publishers.
- Shimp, T. (1981). Attitude toward the ad as mediator of consumer brand choice. *Journal of Advertising*, 10(2), 1-15.
- Single, E. (1996). Harm reduction as an alcohol-prevention strategy. *Journal of Alcohol Health & Research World*, 20(4), 239-242.
- Slater, M., Rouner, D., Beauvais, F., & Murphy, K. (1996). Adolescent perceptions of underage drinkers in TV beer ads. *Journal of Alcohol and Drug Education*, 42(1 Fall), 43-52.
- Smart, R. (1988). Does alcohol advertising affect overall consumption? A review of empirical studies. *Journal of Studies on Alcohol*, 49(4), 314-323.
- Smart, R., & Cutler, R. (1976). The alcohol advertising ban in British Columbia: Problems and effects on beverage consumption. *British Journal of Addiction*, 71, 13-21.
- Snipes, R., LaTour, M., & Bliss, S. (1999). A model of the effects of self-efficacy on the perceived ethically and performance of fear appeals in advertising. *Journal of Business Ethics*, 19(3), 273-285.
- Solomon, M., R. (1999). *Consumer behavior: Buying, having & being* (4). New Jersey: Prentice Hall.
- SPSS for Windows: Help Tutorial. (2001). SPSS (Version release 11.0): SPSS Software.

- Statsoft. (2002). *Glossary*, 2002 [on-line] Available from www.statsoft.com
- Steinberg, L., Lamborn, S., D., Darling, N., Mounts, N., S., & Dornbusch, S. M. (1994). Over-time changes in adjustment & competence among adolescence from authoritative, indulgent & neglected families. *Journal of Child Development*, 65, 754-770.
- Strickland, D. (1982). Alcohol advertising: Orientations and influence. *Journal of Advertising*, 1, 307-319.
- Strickland, D., Finn, A., & Lambert, D. (1982). A content analysis of beverage alcohol advertising. *Journal of Studies on Alcohol*, 43(7), 655-682.
- Sydney History. (1999). Restored historical houses, museums and attractions [on-line]. Available <http://www.sydney-australia.net/tourism/sydney/history/sydhist1.html>.
- Tanner, J., Hunt, J., & Eppright, D. (1991). The protection motivation model: A normative model of fear appeals. *Journal of Marketing*, 55(July), 36-45.
- Toomey, T., Rosenfeld, C., & Wagenaar, A. (1996). The minimum legal drinking age: History, effectiveness and the ongoing debate. *Alcohol Health & Research World*, 24(4), 213-218.
- Tripp, G. (1988/89). Fear advertising - It doesn't work! *Health Promotion*, Winter, 23-27.
- Tversky, A., & Kahnema, D. (1981). *The framing of decisions and the psychology of choice* (211), University Press, New York.
- University of Western Australia. (1999, 6 July, 1999). *Operant and instrumental conditioning*. Retrieved 30 May, 2002, from www.general.uwa.edu.au/u/kraepeln/bs/bs130/operant.htm
- Unwin, E. (1996). *Drug caused deaths in Western Australia, 1984 –1994*. Health Information Centre, Health Department of Western Australia.
- Unwin, E., Codde, J., Swenson, G & Saunders, P. (1997). *Alcohol-caused deaths and hospitalisation in Western Australia, by health services*. Epidemiological occasional paper 88. Health Information Centre, Health Department of Western. .
- Wackman, D., & Wartella, E. (1977). A review of cognitive development theory and research and the implication for research on children's responses to television. *Journal of Communication Research*, 4(2 April), 203-225.

- Wallace, A. (1986). *Homicide: The social reality*. Sydney: New South Wales Bureau of Crime Statistics and Research.
- Ward, S., & Wackman, D. (1971). Family and media influences on adolescent consumer learning. *The American Behavioral Scientist*, 14(January - February), 415-427.
- Warhaft, S. (2000). Generation Y [Radio]. In Radio National (Producer), *Encounter*. Sydney: Australian Broadcasting Corporation.
- Western Australian Department of Education. (2001). *School Census*, 2001, from <http://www2.eddept.wa.edu.au>
- Western Australian Education Department. (2000). *Summary statistics for Western Australian schools*. Perth: Corporate Information Management.
- Williams, C., & Perry, C. (1998). Lessons from Project Northland: Preventing alcohol problems during adolescence. *Alcohol and Research World*, 22(2), 107-119.
- Windle, M. (1996). Effect of parental drinking on adolescents. *Alcohol Health & Research World*, 20(3), 181-184.
- Witte, K., & Allen, M. (2000). A meta-analysis for fear appeals: Implications for effective public health campaigns. *Health Education and Behavior*, 27(5, Oct), 591-615.
- Witte, K., Berkowitz, J., & Cameron, K. (1998). Preventing the spread of genital warts: Using fear appeals to promote self-protective behaviors. *Health Education & Behavior*, 25(5), 571-585.
- Wood, C. (1995). Drink-drunk: The difference is who? *Connexions*, Dec-Jan, 16-21.
- Wyllie, A., Casswell, S., & Stewart, J. (1991). The response of young men to increased television advertising of alcohol in New Zealand. *Health Promotion International*, 6(3), 191-197.
- Wyllie, A., Holibar, F., Casswell, S., & Fuamatu, N. (1997). A qualitative investigation of responses to televised alcohol advertisements. *Journal of Contemporary Drug Problems*, 24(1), 103-132.
- Wyllie, A., Zhang, F., & Casswell, S. (1998). Responses to televised alcohol advertisements associated with drinking behaviour of 10-17-Year-Olds. *Journal of Addiction*, 93(3), 361-371.
- Zajonc, R. (1968). Attitudinal effects of mere exposure. *Journal of Personality Social Psychology*, 9(7), 1-27.

Zikmund, W. (1997). *Exploring marketing research* (6). Fort Worth, Texas: The Dryden Press - Harcourt Brace

Zinser, O., Freeman, J., & Ginnings, D. (1999). A comparison of memory for and attitudes about alcohol, cigarette and other product advertising in college students. *Journal of Drug Education*, 29(2), 175-185.

Appendices

Appendix 1: Western Australia Education Department - Devolution Statement

Appendix 2: The first "Opt-in" letter that was initially intended to be sent home with students (Included also, follow-up reminder letter)

Appendix 3: This is the Edith Cowan University ethics committee – Revised "Opt-out" clearance application

Appendix 4: The second "Opt-out" revised letter that was ultimately sent home with all of the students

Appendix 5: Questionnaire - Version 1

Appendix 6: Questionnaire - Version 2

Appendix 7: Male storyboard – First edit of voice-over scripts

Appendices 8: Questionnaire re-ordering table

Appendix 1: Western Australian Education Department - Devolution Statement

POLICY ON RESEARCH IN GOVERNMENT SCHOOLS 2013

Background

Western Australia's public schools are the largest provider of education in the state, with over 1,000 schools and over 1 million students. The Department of Education is committed to ensuring that all students have access to high quality education and that schools are able to meet the needs of their students. This commitment is reflected in the Department's policy on research in government schools, which aims to ensure that research is used to improve student outcomes and that schools are able to make evidence-based decisions about their practice.

The Department's policy on research in government schools is based on the following principles:

- 1. Research should be used to improve student outcomes and to inform school practice.
- 2. Research should be used to inform school practice and to improve student outcomes.
- 3. Research should be used to inform school practice and to improve student outcomes.
- 4. Research should be used to inform school practice and to improve student outcomes.
- 5. Research should be used to inform school practice and to improve student outcomes.

Further information about the Department's policy on research in government schools can be found on the Department's website.

Western Australian Education Department
2013

POLICY ON RESEARCH IN GOVERNMENT SCHOOLS

FOREWORD

During the 1970s and 1980s, the central office of the Education Department and later, the Ministry of Education, took responsibility for approving proposals for outside researchers to conduct research in government schools. In recent years, awareness of the importance of consultation and discussion as bases for decision-making in schools has grown. This approach is consistent with the process of devolution.

This *Policy and Guidelines* statement is intended to reflect the changing responsibilities in the decision-making process concerning research in government schools and is based on the following principles:

- The decision as to whether to participate in a research project should lie with the individual school, except where there is a perceived system-wide value to the Ministry;
- Schools should expect a research institution to have thoroughly vetted each research proposal in terms of its adherence to appropriate ethical standards and the professional competence of the researchers;
- Schools should consult with their decision-making groups and seek comment from them where the content of the research relates to controversial issues; and
- If research proposals involve a large number of schools, they should be forwarded to the central office where officers with substantive responsibility for the relevant area will determine whether participation is in the interests of the Ministry as a whole.

Further information if required may be obtained from Corporate Management on (09) 264 4582.

GREG BLACK - CHIEF EXECUTIVE OFFICER

8 October 1992

POLICY

1. Individual schools shall determine whether to participate in research projects proposed by agencies outside the Ministry.
2. Responsibility for the quality control of the research, with particular regard to ethics and methodology, shall reside with the research institution initiating the project.
3. Where a researcher seeks the involvement of a large number of schools, or where a State sample is required for a national study, the proposal should be forwarded to the central office.
4. Participation in surveys of teachers initiated outside the Ministry should be a matter for the discretion of individual teachers.
5. The health of students should not be put at risk as a consequence of participation in a research project.

GUIDELINES

1. Schools are encouraged to participate in educational research where possible.
 2. Schools should require that researchers draw attention in their research proposals to any controversial issues. They should seek parent comment and discuss these matters in their school decision-making groups before deciding whether to participate.
 3. Where proposals for research which involve a number of schools are forwarded to the central office, officers with substantive responsibility or the relevant content area should determine whether participation is in the interests of the Ministry. Individual schools which are then approached by the researcher retain the authority to decide whether to participate.
 4. Schools should require written evidence that research proposals have been thoroughly vetted, with respect to ethics and methodology by the research institutions.
 5. Before agreeing to participate, schools should understand what they are being asked to contribute in terms of time, personnel, students, space, organisation, etc and what they will get in return.
 6. If the request for participation is from a non-tertiary or commercial organisation, schools should be assured of the benefit to education of the proposed research and the bona fides of the researcher(s) who will carry out the work.
-

Appendix 2: The first “Opt-in” letter that was initially intended to be sent home with students (Included also, follow-up reminder letter).

The first Opt-in letter was designed to be sent home with students at the beginning of the school year. It was intended to be sent home with students at the beginning of the school year.

All of the information that was included in the letter was intended to be sent home with students at the beginning of the school year. It was intended to be sent home with students at the beginning of the school year.

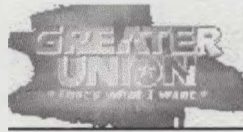
The letter was intended to be sent home with students at the beginning of the school year. It was intended to be sent home with students at the beginning of the school year.

The letter was intended to be sent home with students at the beginning of the school year. It was intended to be sent home with students at the beginning of the school year.

The letter was intended to be sent home with students at the beginning of the school year. It was intended to be sent home with students at the beginning of the school year.

The letter was intended to be sent home with students at the beginning of the school year. It was intended to be sent home with students at the beginning of the school year.

SAMPLE



XXXX October, 2001

Dear Student & Parent

**Be the One in Your Class to
WIN a Double Movie Pass to a
Greater Union Cinema**

STUDENT SURVEY: SUBJECT SCHOOL XX

“Alcohol Restraint Television Advertisements Targeted at Adolescents: A Three-Way Comparison on Reinforcement Styles on Attitude to the Advertisement, Attitude to the Cause & Attitude to Act.”

Hi! Did you know that Health Department research has indicated that by age 15, approximately 12 per cent of male students and 20 per cent of female students had at least once in the last week, exceeded the recommended National Health and Medical Research Council guidelines for “safe” adult alcohol intake? In Australia, teenagers often report they drink alcohol for the sole purpose of getting drunk, and to get drunk as quickly as possible.

As you might imagine, when young people drink alcohol or drink too much alcohol, the incidence of injury, violence, relationship conflict, anti-social behaviours, and other negative personal and social outcomes drastically increase. All of these outcomes teenagers no doubt would prefer to avoid.

Wouldn't it be worthwhile if we could help equip young people to make better choices about how they approached their future experimentation and use of alcohol?

I'm Neil Robinson and I am a Post Graduate student in Marketing at Edith Cowan University. I am doing research to try and determine what might be the most appropriate way to design a TV advertisement that would effectively talk with teenagers about alcohol restraint. To do this, I am seeking out the opinions of year 9 and 10 Perth school students. To this end, I have randomly selected Carine Senior High School among others to participate in this brief but important study.

I'm asking that you along with your classmates, please help by viewing a series of TV commercial “storyboards” on VHS video that will be presented in a cartoon strip type format. These storyboards will also be accompanied by an audio dramatisation of those events being depicted in three different alcohol-

drinking scenarios. You will then be asked to give me your thoughts on these three different advertising concepts.

The study should take only about 40 minutes. You will not be required to put your name on the paper so anything you write will be strictly confidential. Your school won't be identified either.

This study will be a fairly low-key and I think those people that take part will actually have fun participating and they will also get some insight into how advertisements are developed. You will also have the reassurance that your participation in this study will contribute to a wider body of important knowledge that may be used in future to assist in the development of health promotion campaigns.

Here's how you can get to participate. **Can both you and your parent (or legal guardian) please sign-off below on the space provided and return this form to your teacher by _____.** If you or your parent have any questions whatsoever about this study, please don't hesitate in calling me on 9448 0864 or emailing on n.robinson@ecu.edu.au.

As acknowledgement of your efforts in offering to participate and getting this form signed and back to school, you will go into the draw held on the day of the study to be the person in your class who ***WINS*** a double movie pass to a Greater Union Cinema.

I _____ (the student participant) have read the information above and I feel informed about this study and feel comfortable in participating. I also still realise I can withdraw on the day at any time if I so choose.

I agree that the information gathered in this school study can be published, provided I am not identified.

Signature of parent or legal guardian

_____ / October, 2001

Date

Signature of student participant

_____ / October, 2001

Date

Thank you and good luck! _____ *Neil Robinson.*

P.S. Don't forget to bring this form back in to school by _____ to go into the draw to be the one in your class to ***WIN*** a double movie pass to a Greater Union Cinema.



SAMPLE



XXXX October, 2001

Dear Student & Parent

Be the One in Your Class to
WIN a Double Movie Pass to a
Greater Union Cinema

STUDENT SURVEY: SUBJECT SCHOOL XX

“Alcohol Restraint Television Advertisements Targeted at Adolescents: A Three-Way Comparison on Reinforcement Styles on Attitude to the Advertisement, Attitude to the Cause & Attitude to Act.”

Hi! This is just the friendliest of reminders.

I have not as yet received your signed permission form back that will allow you to participate in the study that's coming to your school in the next couple of days. I'm figuring it's just been forgotten. Can you please return this to your teacher as soon as you possibly can, or bring it on the day.

Time is running out. See attached another form in case you lost the last one.

Again, if you have any concerns or questions about this study please call me on the number or email address provided below.

Thank You,

Neil Robinson – Post Graduate Student

Edith Cowan University, Churchlands

Phone: 9448 0864 or email me on n.robinson@ecu.edu.au.

P.S. Don't be concerned that you are now late, you still have the opportunity to be the one in your class to WIN a double movie pass to a Greater Union Cinema.

Appendix 3: This is the ECU Ethics Committee – Revised “Opt-out” clearance application.

Neil Robinson – Student Number: 0928237

Masters Candidate

Marilyn Beresford - Ethics Department

Edith Cowan University

CC: The Ethics Committee

Phone: 9273 8170

Fax: 9273 3866

email: m.beresford@ecu.edu.au

Dear Ethics Committee,

Regarding my study that was approved on the 10th of October 2001. This Master's Thesis study was titled: *Alcohol Restraint Television Advertisements Targeted at Adolescents: A Three-Way Comparison on Reinforcement Styles on Attitude to the Advertisement, Attitude to the Cause and Attitude to Act.*

After much phoning, faxing, emailing etc., I have been pleased to manage to get what looks like enough school teachers expressing an initial interest in participating in some way with my research study being conducted in November. The snag I have run into though is with my *Letter of Permission* I am sending home with the students (See Exhibit attached). As you may recall, this letter asked students to take the letter home and get their parent or guardians signature before participating in the study. After talking with the teachers they are concerned that the response rate will still be mediocre, despite the inclusion of a free double movie pass winners draw for a winner from each class of students that participates in the study.

Diana Gow, from Ocean Reef SHS for example, is not keen to participate if half her classes have to be "baby sat" (Dianna's words) while the other half participate in my study. She has up to 400 year nine and ten students. I'm concerned some of the teachers are going to put this into the *too-hard* basket. Dianna Gow has gone from being my most enthusiastic supporter to being dubious about getting involved. Karen Bastor at Kent Street SHS has similar feelings, as does Helen Swift of Hamilton SHS.

After talking with my supervisor Kate Mizerski, I am **requesting that the ethics please allow me to send a letter of permission home with the students that requires parents to send the letter back with the child if they *do not* want their child to participate rather than visa versa.**

I have sent a brief of the study and its materials to a number of teachers and they have expressed no concern whatsoever about the design or content of the study. Dianna Gow again after reviewing the proposed research design suggested that there is no problem with the study and I should send a letter home with the students that has an *opt out* rather than an *opt in* function. Helen Swift of Hamilton SHS feels the same way.

Before considering my request on this matter there are some important points I need to make regarding my research design. If a letter of permission requiring parents to sign *before* allowing the students to participate, the following problems are likely to arise (in order):

- 1) As eluded to, students will forget to take them home, forget to get them signed or forget to return them.
- 2) Because of this problem schools therefore, will be less likely to participate under this regime because of the extra diversions that will need to be set up for non-participants.
- 3) Most importantly to my study, under the existing design the participation rate will be reduced and the remaining participants shall bias the survey in favour of measuring more girls and the more organised and better functioning adolescents.
- 4) Many of the students most at-risk from alcohol abuse arguably, will be those that are less organised, less caring etc, and these students shall be excluded from my measures.

Of paramount importance to the university and the wider society is however, the likely ill effect this study might have on minors. Having said this, I unequivocally see no opportunity for there to be any harm whatsoever come about for any individual participating in this study. My feelings on this are based upon the following reasoning:

- 1) The topic is non-confrontational - The whole area of alcohol and in adolescent education is a mainstream issue broached upon by all public SHSs in Western Australia.
-

-
- 2) The subject matter is mainstream and inoffensive - This study involves students viewing advertising frames seen previously on the National Alcohol Campaign that has been deemed socially acceptable by the Commonwealth.
 - 3) The language - The language used in the advertisement contains no swearing or offensive content.
 - 4) The questionnaire is of a confidential type and will be passed by a thesis supervisor and, on the week prior the study, the questionnaire will be approved by the teacher who is assisting.
 - 5) Optional letters of permission - Teachers will be given the option of giving the students an *opt in letter* or an *opt out letter* depending on their philosophical stand.
 - 6) An *opt out on the day* option – If students decide they don't want to participate on the day they will be excluded from the study.

I am hopeful that you will be able to give my study this little bit of leeway **as I think it is needed to make sure I get a more representation of *all* elements of the school population.**
I anticipate your ruling.

Yours Sincerely,

Neil Robinson.

P.S. See attached previously proposed "Letters of Permission" and a storyboard of the type of content seen in the video that will be shown to the students.

Appendix 4: The second “Opt-out” revised letter that was ultimately sent home with all of the students.

SAMPLE

Thursday, 1st of November, 2001



Dear Student & Parent

STUDENT SURVEY: XXXXX SENIOR HIGH SCHOOL

“Alcohol Restraint Television Advertisements Targeted at Adolescents: A Three-Way Comparison on Reinforcement Styles on Attitude to the Advertisement, Attitude to the Cause & Attitude to Act.”

Hi! Did you know that Health Department research has indicated that by age 15, approximately 12 per cent of male students and 20 per cent of female students had at least once in the last week, exceeded the recommended National Health and Medical Research Council guidelines for “safe” adult alcohol intake? In Australia, teenagers often report they drink alcohol for the sole purpose of getting drunk, and to get drunk as quickly as possible.

As you might imagine, when young people drink alcohol or drink too much alcohol, the incidence of injury, violence, relationship conflict, anti-social behaviours, and other negative personal and social outcomes drastically increase. All of these outcomes teenagers no doubt would prefer to avoid.

Wouldn't it be worthwhile if we could help equip young people to make better choices about how they approached their future experimentation and use of alcohol?

I'm Neil Robinson and I am a Post Graduate student in Marketing at Edith Cowan University. I am doing research to try and determine what might be the most appropriate way to design a TV advertisement that would effectively talk with teenagers about alcohol restraint. To do this, I am seeking out the opinions of year 9 and 10 Perth school students. To this end, I have randomly selected XXXXX Senior High School among others to participate in this brief but important study.

I'm asking that your child, along with his or her classmates, to please help by viewing a series of TV commercial “storyboards” on VHS video that will be presented in a cartoon strip type format. These storyboards will also be accompanied by a voice-over dramatisation of those events being depicted in three different alcohol-drinking scenarios. Your child will then be asked to give their thoughts on these three different advertising concepts. It is envisaged that this study will tie in nicely with previous in-class drug education and health education discussions and act as an additional discussion point.

The study should take only about 40 – 50 minutes. Your child will not be required to put his or her name on the paper so anything they write will be strictly confidential. The school won't be identified either.

This study will be a fairly low-key and I think those people that take part will actually have fun participating and they will also get some insight into how advertisements are developed. You will also have the reassurance that your child's participation in this study will produce published material that will contribute to a wider body of important knowledge that may be used in future to assist in the development of health promotion campaigns.

I am asking your child's teacher _____ to hand-out this letter for your child to home to you so that you can contact me if you have any questions whatsoever about this study. I can be contacted by calling 9448 0864 or emailing me on n.robinson@ecu.edu.au. **More importantly, if you or your child has any objections about participating in the study please indicate this on the space provided below and have your child return this form to their teacher and they shall be excused.**

FILL-OUT AND RETURN THIS LETTER - *ONLY IF YOU OR YOUR CHILD OBJECT TO THIS STUDY*

I _____ (Name of the proposed student participant) have read the information above and I feel informed about this study *but I feel uncomfortable in participating.*

I _____ (Name the parent or guardian of the proposed child participant) have read the information above and I feel informed about this study *but I feel uncomfortable in participating.*

_____/ October, 2001

Signature of parent or legal guardian of the proposed student participant. **Date**

_____/ October, 2001

Signature of the proposed student participant **Date**

Thank you!

Neil Robinson.

Appendix 5: Questionnaire – V1 and Questionnaire Matrix

Neil Robinson – Post Graduate Studies

Secondary School Research into Alcohol Advertising Approaches

This is an anonymous questionnaire. Please ensure that you do not write your name, or any other comments that will make you identifiable, on the attached questionnaire. Participation in this study is entirely voluntary. By completing the questionnaire you are consenting to take part in this research.

What is the purpose of this questionnaire?

This questionnaire is being used for the purpose of gathering information that might better assist public health authorities design the right type of ads for speaking to people about the way they choose to use alcohol. As you are probably aware, people sometimes drink too much alcohol or drink alcohol too often. When this occurs, negative outcomes often arise such as health problems, injury, violence, arguments, embarrassment, shame, etc. In particular, this questionnaire will be used to assess your thoughts about three advertising approaches that are meant to try and get people to rethink about how they might choose to use alcohol.

How confidential is this study?

Completely confidential! Your name and the name of your school aren't even needed for this study. So in short, your name or that of your school will never be linked to any of the information that is collected in this class today. This study requires information about your thoughts, feelings and experiences on public health advertising about drinking alcohol. This study will also ask some other questions about your own personal attitudes and experiences with alcohol.

When you're filling out your form today you don't need to share your responses with any of your classmates. It is your personal opinion that is important. When you have completed this questionnaire, your teacher will collect it and it will then be taken away to be processed. This information will be kept secure at all times.

Therefore, please be as honest and accurate as possible. If you don't wish to answer any question for any reason, you don't have to do so. Thanks again for helping!

Section A – Firstly, Your Thoughts About Health Promotion of Alcohol

Question 1

Health authorities try to talk to the community to stop them drinking too much alcohol. They talk to them by using brochures, through doctors, by using TV ads, by visiting schools, they sponsor sport, just to name a few methods.

	Strongly Support	Support	Neither Support nor Oppose	Oppose	Strongly Oppose
1a) Would you support the health authority's attempts to talk to the <i>general community</i> about not drinking too much alcohol?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1b) Would you support the health authority's attempts to talk to <i>teenagers</i> your age about not drinking too much alcohol?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1c) How do you feel about TV ads you see that talk to the <i>general community</i> about not drinking too much alcohol?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1d) How do you feel about TV ads you see that talk to <i>teenagers</i> your age about not drinking too much alcohol?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Question 2

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
2a) I generally like ads on TV that talk to people my age about drinking alcohol....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2b) I feel that ads on TV that talk to people my age about drinking alcohol tend to make a good point	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2c) When I see ads on TV that talk to people my age about drinking alcohol I tend to take notice	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2d) I feel that ads on TV that talk to people my age about drinking alcohol are important to us	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2e) I feel that ads on TV that talk to people my age about drinking alcohol are relevant to me	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Question 3

Firstly, I want you to think about the advertising you see on TV. For example, *ads selling cars, athletic shoes, soft drinks, air travel, CD's and ads talking to you about the environment, road safety, alcohol misuse, etc.* How strongly would you agree or disagree about the following statements?

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
3a) Products that I like tend to have good advertising...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3b) I tend to like the product if I like the ad....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3c) I take more notice of ads I like....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3d) Some ads I like better than others....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3e) I rely on TV advertising to find out about products or things I should know about....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3f) Products or things that are important tend to use TV advertising.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Question 4

Thinking about your favourite ads I see on TV, how would you rate the following ads in terms of being of interest to you....

Note: Rank these from 1 to 7 where: '7' is "*Most Interested*" '1' is "*Least Interested*"

Ranking means to put things in order according to which is most preferred to least preferred. Better still, think of a horse race where someone has to come first, second, third etc. For example, clothes might be 1, the environment might be 2, soft drink might be 3, etc.

Note: You can't use a ranking of say 3, more than once. Each rank can only be used once.

Advertisements for....		Ranking (1 – 7)
Computers	<i>I rank.....</i>	
Clothing	<i>I rank.....</i>	
Preventing Alcohol Misuse	<i>I rank.....</i>	
Soft Drinks	<i>I rank.....</i>	
Compact Discs	<i>I rank.....</i>	
The Environment	<i>I rank.....</i>	
Athletic Shoes	<i>I rank.....</i>	

Question 5

To reduce the problems associated with teenagers drinking too much alcohol, to what extent would you support or oppose.

	Strongly Support	Support	Neither Support nor Oppose	Oppose	Strongly Oppose
5a) Banning alcohol sponsorship of sport and sporting teams?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5b) Limiting ads on TV that sell alcoholic drinks until after 9.30 at night?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5c) Increase the amount of ads on the TV educating people to <i>stop drinking altogether</i> ?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5d) Increase the amount of ads on the TV educating people to <i>drink more carefully</i> ?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5e) Increase the amount of alcohol free public events?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5f) Increase penalties for those people selling alcohol to underage drinkers?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5g) Raising the legal drinking age?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5h) Reducing the number of places that sell alcohol?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5i) Increasing the price of alcohol?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Question 6

If you were given \$10 to spend on reducing alcohol abuse in the community, to the nearest dollar, how much would you spend on each of these areas.

Enter the whole dollars only (For example \$3, \$2, \$5)

6a) Law Enforcement (e.g., stop illegal sale or use)

\$ _____

6b) Treatment (Counselling, therapy)

\$ _____

6c) Education (In school, information services, advertising)

\$ _____

Check your total equals

\$ 10

Section B – Now, Some Questions About the Advertisements

Question 7

Advertisement One: *After seeing the first ad:*

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
7a) I feel that this ad on TV would probably catch my attention....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7b) I feel that this ad on TV would be important to me....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7c) I feel the young person in the ad is going to be a success....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7d) I feel the young person in the ad was a person I would like to be....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7e) I feel the young person in the ad is someone I could be like....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7f) I feel the young person in the ad is someone I would like....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7g) I liked this ad idea....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7h) This ad makes me feel that ads trying to stop people my age getting drunk are important...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7i) I feel that this ad on TV would tend to make a good point....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7j) I think I would support this ad idea....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7k) I would support health promotions if they were like this ad....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Question 8

Advertisement One: *After seeing the first ad:*

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
8a) I think this type of ad would encourage me to talk to a friend who drinks too much alcohol.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8b) I think this type of ad would make me decide not to drink alcohol at all....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8c) I think this type of ad would make me be more careful or restrained with alcohol....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Question 9

Advertisement Two: *After seeing the second ad:*

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
9a) I feel that this ad on TV would probably catch my attention	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9b) I feel that this ad on TV would be important to me....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9c) I feel the young person in the ad is going to be a success	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9d) I feel the young person in the ad was a person I would like to be	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9e) I feel the young person in the ad is someone I could be like	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9f) I feel the young person in the ad is someone I would like	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9g) I liked this ad idea....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9h) This ad makes me feel that ads trying to stop people my age getting drunk are important...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9i) I feel that this ad on TV would tend to make a good point	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9j) I think I would support this ad idea....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9k) I would support health promotions if they were like this ad....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Question 10

Advertisement Two: *After seeing the second ad:*

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
10a) I think this type of ad would encourage me to talk to a friend who drinks too much alcohol.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10b) I think this type of ad would make me decide not to drink alcohol at all....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10c) I think this type of ad would make me be more careful or restrained with alcohol....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Question 11

Advertisement Three: *After seeing the third ad:*

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
11a) I feel that this ad on TV would probably catch my attention....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11b) I feel that this ad on TV would be important to me....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11c) I feel the young person in the ad is going to be a success....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11d) I feel the young person in the ad was a person I would like to be....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11e) I feel the young person in the ad is someone I could be like....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11f) I feel the young person in the ad is someone I would like....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11g) I liked this ad idea....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11h) This ad makes me feel that ads trying to stop people my age getting drunk are important...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11i) I feel that this ad on TV would tend to make a good point....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11j) I think I would support this ad idea....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11k) I would support health promotions if they were like this ad....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Question 12

Advertisement Three: *After seeing the third ad:*

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
12a) I think this type of ad would encourage me to talk to a friend who drinks too much alcohol.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12b) I think this type of ad would make me decide not to drink alcohol at all....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12c) I think this type of ad would make me be more careful or restrained with alcohol....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Section C – Now, Some General Questions About Your Knowledge, Experiences & Beliefs on Alcohol

Question 13

In your opinion, do you think the regular use of alcohol by teenagers your age is OK or Not OK?

☐ OK

☐ Not OK

Question 14

As far as you know, about what proportion of your friends and acquaintances have drunk alcohol?

☐ All

☐ Most

☐ About Half

☐ A Few

☐ None

Question 15

Have you ever drunk alcohol?

☐ Yes

☐ No

Question 16

Have you ever drunk alcohol without your parents knowing?

☐ Yes

☐ No

Question 17

If you said you have drunk alcohol before without your parents knowing, how old were you then?

My age was _____

Question 18

In your opinion, do you think there are **more good things than bad things** when considering drinking alcohol?

☐ Yes, more good than bad in alcohol

☐ No, more bad than good in alcohol

Question 19

If you said you 'have drunk alcohol' before, then how would you currently describe the way you use alcohol?

☐ Don't currently drink

☐ Drink every few months

☐ Drink every day

☐ Drink once or twice per year

☐ Drink once a week or more

☐ Less often

☐ Drink about once a month

Question 20

If you said you drink alcohol, how much do you usually drink each time?

Remember – A “standard drink” is a small glass of wine or a middy of beer, a nip of spirits, or a mixed drink.

- ☐ I Don’t Drink Alcohol
- ☐ 1 to 2 Standard Drinks
- ☐ 3 to 4 Standard Drinks
- ☐ 5 to 6 Standard Drinks
- ☐ 7 to 8 Standard Drinks
- ☐ More than 8 Standard Drinks

Question 21

If you said you drink alcohol, and you have tried to reduce your drinking, what were your reasons for doing this?

- Health reasons (e.g. weight, diabetes, avoid a hangover)?

☐ Yes

☐ No
- Life style reasons (e.g. work/study, other commitments)?

☐ Yes

☐ No
- Social reasons (e.g. Avoid violence, losing control, being a pain)?

☐ Yes

☐ No
- Taste/enjoyment (e.g. prefer low alcohol, don’t like feeling drunk)?

☐ Yes

☐ No
- It’s a waste of money?

☐ Yes

☐ No
- Others? (Specify) _____

☐ Yes

☐ No

Question 22

What is your current age? ☐ 13 years ☐ 14 years ☐ 15 years ☐ 16 years

Question 23

Are you male or female? ☐ Male ☐ Female

THE END – THANK YOU!

Office Use

Order of Presentation	<input type="checkbox"/> P N C	<input type="checkbox"/> N C P	<input type="checkbox"/> C P N
<input type="checkbox"/> Year 9	<input type="checkbox"/> Year 10	<input type="checkbox"/> Checked!	Version V1

Question's & Hypotheses	Hypotheses – Questionnaire V1	Questionnaire Questions
Hypothesis 1	<i>Under a punishment reinforcement execution style, adolescents will have a more positive attitude toward the cause (+Ac) of reducing adolescent binge drinking than a positive reinforcement approach</i>	7 h, l, j, k 9 h, l, j, k 11 h, l, j, k
Hypothesis 2	<i>Under a punishment reinforcement execution style, adolescents will have a more positive attitude toward the advertisement (+Aad) than a positive reinforcement approach</i>	7 a, b, c, d, e, f, g 9 a, b, c, d, e, f, g 11 a, b, c, d, e, f, g
Hypothesis 3	<i>Under the punishment reinforcement execution style, adolescents will report a greater intention to use restraint when consuming alcohol or refrain from using alcohol altogether (+Aact) than might be expected from a positive reinforcement approach</i>	8 a, b, c 10 a, b, c 12 a, b, c
Hypothesis 4	<i>Using a dual punishment/positive reinforcement execution style, adolescents will report a more positive attitude toward the cause (+Ac) of reducing adolescent binge drinking than if the execution relied solely on either a punishment or a positive reinforcement.</i>	7 h, l, j, k 9 h, l, j, k 11 h, l, j, k
Hypothesis 5	<i>Using a dual punishment/positive reinforcement execution style, adolescents will report a more positive attitude toward the advertisement (+Aad) than if the execution relied solely on either a positive or a negative reinforcement execution.</i>	7 a, b, c, d, e, f, g 9 a, b, c, d, e, f, g 11 a, b, c, d, e, f, g
Hypothesis 6	<i>Using a dual punishment/positive reinforcement execution style, adolescents will report a greater intention to use restraint when consuming alcohol or refrain totally from consuming alcohol (+Aact) than would be expected if the execution relied solely on either a positive or a negative reinforcement execution.</i>	8 a, b, c 10 a, b, c 12 a, b, c

Appendix 6: Questionnaire – V2 and Questionnaire Matrix

Questionnaire

Neil Robinson – Post Graduate Studies

Secondary School Research into Alcohol Advertising Approaches

This is an anonymous questionnaire. Please ensure that you do not write your name, or any other comments that will make you identifiable, on the attached questionnaire. Participation in this study is entirely voluntary. By completing the questionnaire you are consenting to take part in this research.

What is the purpose of this questionnaire?

This questionnaire is being used for the purpose of gathering information that might better assist public health authorities design the right type of ads for speaking to people about the way they choose to use alcohol. As you are probably aware, people sometimes drink too much alcohol or drink alcohol too often. When this occurs, negative outcomes often arise such as health problems, injury, violence, arguments, embarrassment, shame, etc. In particular, this questionnaire will be used to assess your thoughts about three advertising approaches that are meant to try and get people to rethink about how they might choose to use alcohol.

How confidential is this study?

Completely confidential! Your name and the name of your school aren't even needed for this study. So in short, your name or that of your school will never be linked to any of the information that is collected in this class today. This study requires information about your thoughts, feelings and experiences on public health advertising about drinking alcohol. This study will also ask some other questions about your own personal attitudes and experiences with alcohol.

When you're filling out your form today, you don't need to share your responses with any of your classmates. It is your personal opinion that is important. When you have completed this questionnaire, your teacher will collect it and it will then be taken away to be processed. This information will be kept secure at all times.

Therefore, please be as honest and accurate as possible. If you don't wish to answer any question for any reason, you don't have to do so. Thanks again for helping!

Section A – Firstly, Your Thoughts About Health Promotion of Alcohol

Question 1

Health authorities try to talk to the community to stop them drinking too much alcohol. They talk to them by using brochures, through doctors, by using TV ads, by visiting schools, they sponsor sport, just to name a few methods.

	Strongly Support	Support	Neither Support nor Oppose	Oppose	Strongly Oppose
1a) Would you support the health authority's attempts to talk to the <i>general community</i> about not drinking too much alcohol?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1b) Would you support the health authority's attempts to talk to <i>teenagers</i> your age about not drinking too much alcohol?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1c) How do you feel about TV ads you see that talk to the <i>general community</i> about not drinking too much alcohol?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1d) How do you feel about TV ads you see that talk to <i>teenagers</i> your age about not drinking too much alcohol?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Question 2

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
2a) I feel that ads on TV that talk to people my age about drinking alcohol are relevant to me....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2b) I feel that ads on TV that talk to people my age about drinking alcohol are important to us....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2c) When I see ads on TV that talk to people my age about drinking alcohol I tend to take notice....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2d) I feel that ads on TV that talk to people my age about drinking alcohol tend to make a good point....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2e) I generally like ads on TV that talk to people my age about drinking alcohol....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Question 3

Firstly, I want you to think about the advertising you see on TV. For example, *ads selling cars, athletic shoes, soft drinks, air travel, CD's and ads talking to you about the environment, road safety, alcohol misuse, etc.* How strongly would you agree or disagree about the following statements?

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
3a) Products or things that are important tend to use TV advertising.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3b) I rely on TV advertising to find out about products or things I should know about....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3c) Some ads I like better than others....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3d) I take more notice of ads I like....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3e) I tend to like the product if I like the ad....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3f) Products that I like tend to have good advertising...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Question 4

Thinking about your favourite ads I see on TV, how would you rate the following ads in terms of being of interest to you....

Note: Rank these from 1 to 7 where: '7' is "*Most Interested*" '1' is "*Least Interested*"

Ranking means to put things in order according to which is most preferred to least preferred. Better still, think of a horse race where someone has to come first, second, third etc. For example, clothes might be 1, the environment might be 2, soft drink might be 3, etc.

Note: You can't use a ranking of say 3, more than once. Each rank can only be used once.

Advertisements for....		Ranking (1 – 7)
Athletic Shoes	<i>I rank....</i>	
The Environment	<i>I rank....</i>	
Compact Discs (CD's)	<i>I rank....</i>	
Soft Drinks	<i>I rank....</i>	
Preventing Alcohol Misuse	<i>I rank....</i>	
Clothing	<i>I rank....</i>	
Computers	<i>I rank....</i>	

Question 5

To reduce the problems associated with teenagers drinking too much alcohol, to what extent would you support or oppose:

	Strongly Support	Support	Neither Support nor Oppose	Oppose	Strongly Oppose
5a) Increasing the price of alcohol?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5b) Reducing the number of places that sell alcohol?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5c) Raising the legal drinking age?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5d) Increase penalties for those people selling alcohol to underage drinkers?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5e) Increase the amount of alcohol free public events?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5f) Increase the amount of ads on the TV educating people to <i>drink more carefully</i> ?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5g) Increase the amount of ads on the TV educating people to <i>stop drinking altogether</i> ?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5h) Limiting ads on TV that sell alcoholic drinks until after 9.30 at night?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5i) Banning alcohol sponsorship of sport and sporting teams?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Question 6

If you were given \$10 to spend on reducing alcohol abuse in the community, to the nearest dollar, how much would you spend on each of these areas:

Enter the whole dollars only (For example \$3, \$2, \$5)

6a) Education (In school, information services, advertising)	\$	_____
6b) Treatment (Counselling, therapy)	\$	_____
6c) Law Enforcement (e.g., stop illegal sale or use)	\$	_____
Check your total equals	\$	10

Section B – Now, Some Questions About the Advertisements

Question 7

Advertisement One: *After seeing the first ad:*

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
7a) I feel that this ad on TV would probably catch my attention....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7b) This ad makes me feel that ads trying to stop people my age getting drunk are important...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7c) I feel that this ad on TV would be important to me....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7d) I feel that this ad on TV would tend to make a good point....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7e) I feel the young person in the ad is going to be a success....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7f) I feel the young person in the ad was a person I would like to be....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7g) I feel the young person in the ad is someone I could be like....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7h) I feel the young person in the ad is someone I would like....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7i) I think I would support this ad idea....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7j) I liked this ad idea....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7k) I would support health promotions if they were like this ad....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Question 8

Advertisement One: *After seeing the first ad:*

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
8a) I think this type of ad would make me be more careful or restrained with alcohol....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8b) I think this type of ad would make me decide not to drink alcohol at all....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8c) I think this type of ad would encourage me to talk to a friend who drinks too much alcohol.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Question 9

Advertisement Two: *After seeing the second ad:*

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
9a) I feel that this ad on TV would probably catch my attention....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9b) This ad makes me feel that ads trying to stop people my age getting drunk are important...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9c) I feel that this ad on TV would be important to me....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9d) I feel that this ad on TV would tend to make a good point....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9e) I feel the young person in the ad is going to be a success....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9f) I feel the young person in the ad was a person I would like to be....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9g) I feel the young person in the ad is someone I could be like....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9h) I feel the young person in the ad is someone I would like....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9i) I think I would support this ad idea....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9j) I liked this ad idea....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9k) I would support health promotions if they were like this ad....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Question 10

Advertisement Two: *After seeing the second ad:*

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
10a) I think this type of ad would make me be more careful or restrained with alcohol....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10b) I think this type of ad would make me decide not to drink alcohol at all....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10c) I think this type of ad would encourage me to talk to a friend who drinks too much alcohol...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Question 11

Advertisement Three: *After seeing the third ad:*

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
11a) I feel that this ad on TV would probably catch my attention....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11b) This ad makes me feel that ads trying to stop people my age getting drunk are important...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11c) I feel that this ad on TV would be important to me....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11d) I feel that this ad on TV would tend to make a good point....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11e) I feel the young person in the ad is going to be a success....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11f) I feel the young person in the ad was a person I would like to be....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11g) I feel the young person in the ad is someone I could be like....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11h) I feel the young person in the ad is someone I would like....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11i) I think I would support this ad idea....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11j) I liked this ad idea....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11k) I would support health promotions if they were like this ad....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Question 12

Advertisement Three: *After seeing the third ad:*

	Strongly Disagree	Disagree	Neither Agree or Disagree	Agree	Strongly Agree
12a) I think this type of ad would make me be more restrained or careful with alcohol....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12b) I think this type of ad would make me decide not to drink alcohol at all....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12c) I think this type of ad would encourage me to talk to a friend who drinks too much alcohol.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Section C – Now, Some General Questions About Your Knowledge, Experiences & Beliefs on Alcohol

Question 13

In your opinion, do you think the regular use of alcohol by teenagers your age is OK or Not OK?

- ☐ OK
- ☐ Not OK

Question 14

As far as you know, about what proportion of your friends and acquaintances have drunk alcohol?

- ☐ All
- ☐ Most
- ☐ About Half
- ☐ A Few
- ☐ None

Question 15

Have you ever drunk alcohol? ☐ Yes ☐ No

Question 16

Have you ever drunk alcohol without your parents knowing? ☐ Yes ☐ No

Question 17

If you said you have drunk alcohol before without your parents knowing, how old were you then?

My age was _____

Question 18

In your opinion, do you think there are more good things than bad things when considering drinking alcohol?

- ☐ Yes, more good than bad in alcohol
- ☐ No, more bad than good in alcohol

Question 19

If you said you ‘have drunk alcohol’ before, then how would you currently describe the way you use alcohol?

- ☐ Don’t currently drink
- ☐ Drink every few months
- ☐ Drink every day
- ☐ Drink once or twice per year
- ☐ Drink once a week or more
- ☐ Less often
- ☐ Drink about once a month

Question 20

If you said you drink alcohol, how much do you usually drink each time?
Remember – A “standard drink” is a small glass of wine or a middy of beer, a nip of spirits, or a mixed drink.

- ☐ I Don’t Drink Alcohol
- ☐ 5 to 6 Standard Drinks
- ☐ 1 to 2 Standard Drinks
- ☐ 7 to 8 Standard Drinks
- ☐ 3 to 4 Standard Drinks
- ☐ More than 8 Standard Drinks

Question 21

If you said you drink alcohol, and you have tried to reduce your drinking, what were your reasons for doing this?

- Health reasons (e.g. weight, diabetes, avoid a hangover)?

☐ Yes

☐ No
- Life style reasons (e.g. work/study, other commitments)?

☐ Yes

☐ No
- Social reasons (e.g. Avoid violence, loosing control, being a pain)?

☐ Yes

☐ No
- Taste/enjoyment (e.g. prefer low alcohol, don’t like feeling drunk)?

☐ Yes

☐ No
- It’s a waste of money?

☐ Yes

☐ No
- Others? (Specify) _____

☐ Yes

☐ No

Question 22

What is your current age? ☐ 13 years ☐ 14 years ☐ 15 years ☐ 16 years

Question 23

Are you male or female? ☐ Male ☐ Female

THE END – THANK YOU!

Office Use			
Order of Presentation	<input type="checkbox"/> P N C	<input type="checkbox"/> N C P	<input type="checkbox"/> C P N
<input type="checkbox"/> Year 9	<input type="checkbox"/> Year 10	<input type="checkbox"/> Checked!	Version V2

Question's & Hypotheses	Hypotheses – Questionnaire V2	Questionnaire Questions
Hypothesis 1	<i>Under a punishment reinforcement execution style, adolescents will have a more positive attitude toward the cause (+Ac) of reducing adolescent binge drinking than a positive reinforcement approach</i>	7 b, d, i k 9 b, d, i k 11 b, d, i k
Hypothesis 2	<i>Under a punishment reinforcement execution style, adolescents will have a more positive attitude toward the advertisement (+Aad) than a positive reinforcement approach</i>	7 a, c, e, f, g, h, j 9 a, c, e, f, g, h, j 11 a, c, e, f, g, h, j
Hypothesis 3	<i>Under the punishment reinforcement execution style, adolescents will report a greater intention to use restraint when consuming alcohol or refrain from using alcohol altogether (+Aact) than might be expected from a positive reinforcement approach</i>	8 a, b, c 10 a, b, c 12 a, b, c
Hypothesis 4	<i>Using a dual punishment/positive reinforcement execution style, adolescents will report a more positive attitude toward the cause (+Ac) of reducing adolescent binge drinking than if the execution relied solely on either a punishment or a positive reinforcement.</i>	7 b, d, i k 9 b, d, i k 11 b, d, i k
Hypothesis 5	<i>Using a dual punishment/positive reinforcement execution style, adolescents will report a more positive attitude toward the advertisement (+Aad) than if the execution relied solely on either a positive or a negative reinforcement execution.</i>	7 a, c, e, f, g, h, j 9 a, c, e, f, g, h, j 11 a, c, e, f, g, h, j
Hypothesis 6	<i>Using a dual punishment/positive reinforcement execution style, adolescents will report a greater intention to use restraint when consuming alcohol or refrain totally from consuming alcohol (+Aact) than would be expected if the execution relied solely on either a positive or a negative reinforcement execution.</i>	8 a, b, c 10 a, b, c 12 a, b, c

Appendix 7: Male storyboard – First edit of voice-over scripts.

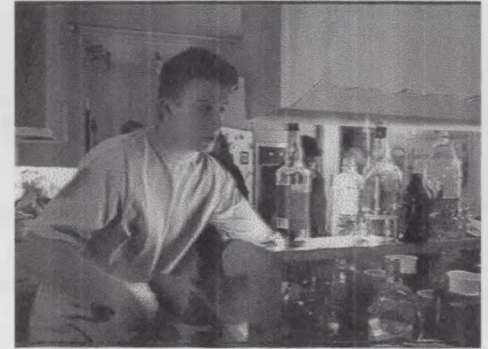
Male Scenario One: Positive Reinforcement



VO: Its been a good party but its just about over so Andrew & his friends are out there. They want to kick-on!



VO: So Andrew grabs Cassie, his new girlfriend and his other friends Luke & Julie.



VO: When Andrew's leaving he sees half a bottle of scotch that is left over & thinks, maybe I should get wasted. The drink's there!



VO: On second thoughts, Andrew figures he can do without getting faced & having things going to hell. Just tonight he's seen a few mates get so wasted they ended up making real jerks of themselves. Everyone thought they were losers!



VO: That night some of the others went to the park by the beach to get wasted. Andrew & the guys went into town and checked out some cool places, hung-out & got something to eat. There was plenty going on & Andrew enjoying being with his friends. They're pretty cool to be with.



VO: Andrew's figuring Cassie just seems to get better & better. She's really cool!

Male Scenario One: Positive Reinforcement



VO: *Andrew reckons its your own decision whether your going to get wasted, but it just doesn't stack up. If you do figure you're going to have a few drinks you're better to at least be a bit I control.*

As Andrew heads home with Cassie, he thinks great, no school tomorrow & I'm going to have an early morning surf. Cool!

***"How well do
your
decisions
work for you?"***

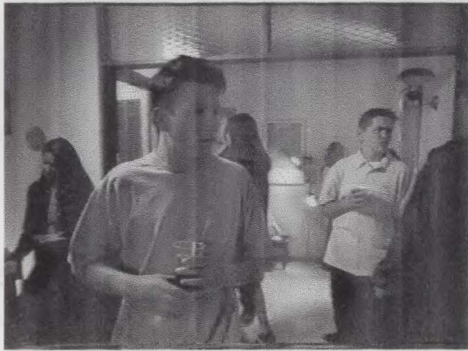
VO: *How well do your decisions work for you?*

Editing:

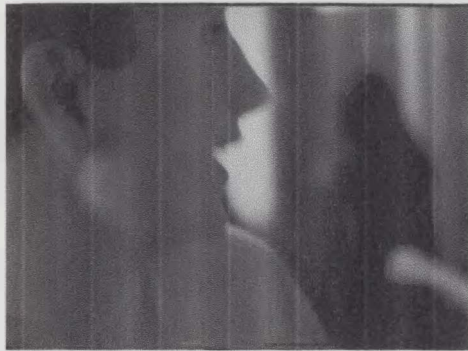
SFX: Background music throughout

SFX: Background crowd/party throughout

Male Scenario Two: Negative (Threat) Reinforcement



VO: Its been a good party but its just about over so Andrew & his friends are out there. They want to kick-on!



VO: So Andrew grabs Cassie, his new girlfriend and his other friends Luke & Julie.

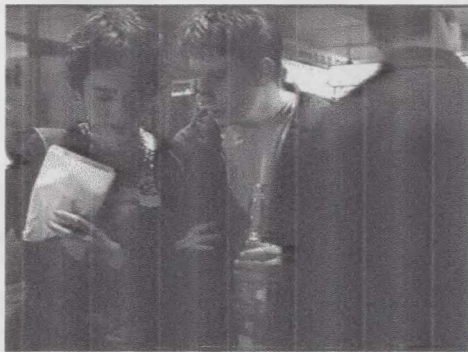


VO: When Andrew's leaving he sees half a bottle of scotch that is left over & thinks, maybe I should get wasted. The drink's there!



VO: Andrew decides to grab the scotch & he gets stuck into it with his friend Luke.

The girls are getting left out & Andrew & Luke keep falling behind & carrying on. Andrew doesn't care, he figures if your not going hard you may as well go home.



VO: Andrew gets really wasted & makes a nuisance of himself.

Cassie thinks he's turning into a pig. He's being rude, nasty & he's being embarrassing. People walking by think he's an idiot.

Then Andrew staggers into this guy who's just walking past.



VO: Because Andrew has turned into such a loser, he gets it all wrong & picks a fight with this guy. By this time Andrew can't even talk right!

Male Scenario Two: Negative (Threat) Reinforcement



VO: Andrew figures he's gonna hit this guy, but he's so out-of-it he swings around like a baby.

He accidentally smacks Cassie in the mouth when she tries to stop him from making an idiot of himself.



VO: Andrew gets knocked to the ground by this guy who tells him he's a jerk. Andrew gets up to help Cassie but everyone in the street tells him to just get lost.



VO: Andrew's too wiped out to even try to fix things. Cassie's been taken home, or to the hospital maybe. He's on his own.

He thinks to himself, why did I drink all that booze? I'm an idiot!

***"How well do
your
decisions
work for you?"***

VO: How well do your decisions work for you?

Editing:

SFX: Background music throughout

SFX: Background crowd/party throughout

Male Scenario Three: Combination Threat / Positive Reinforcement



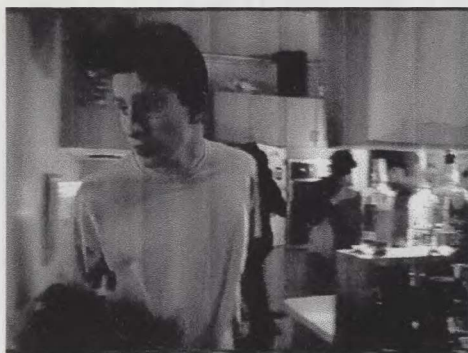
VO: Its been a good party but its just about over so Andrew & his friends are outa there. They want to kick-on!



VO: So Andrew grabs Cassie, his new girlfriend and his other friends Luke & Julie.



VO: When Andrew's leaving he sees half a bottle of scotch that is left over & thinks, maybe I should get wasted. The drink's there! He has two options, to get stuck into it & become "Go-hard Andrew" or he could be "Restrained Andrew" exercising caution? Initially, Andrew figures holding back on a Saturday night doesn't seem right?



VO: The "Restrained Andrew" figures he can do without getting faced & having things going to hell. Just tonight he's seen a few mates get so wasted they ended up making real jerks of themselves. Everyone thought they were losers!



VO: That night some of the others went to the park by the beach to get wasted but Restrained Andrew & the guys went into town and checked out some cool places, hung-out & got something to eat. There was plenty going on & Andrew enjoying being with his friends. They're pretty cool to be with.



VO: Meanwhile, "Go-hard Andrew" had decided to grab the scotch. Why not get wasted he figures, the drink's there!

Male Scenario Three: Combination Threat / Positive Reinforcement

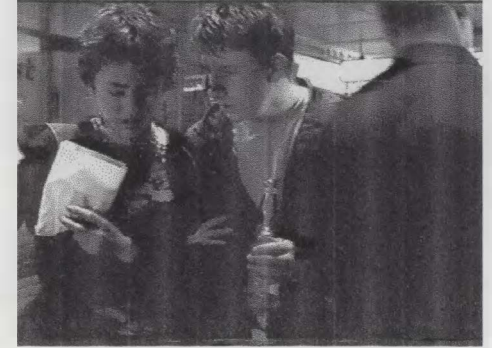


VO: Go-hard Andrew & Luke get stuck into the scotch.

The girls get left out & Andrew & Luke keep falling behind & carrying on. Go-hard Andrew doesn't care. He figures if your not going hard you may as well go home.



VO: Meanwhile, while Go-hard Andrew is cutting loose, Restrained Andrew's is spending time with Cassie. He's thinking Cassie just seems to get better & better. She's really cool!



VO: By now Go-hard Andrew is getting really wasted & Cassie finds he's making a nuisance of himself.

Cassie thinks Go-hard Andrew is turning into a pig. He's being rude, nasty & he's being embarrassing. People walking by think he's an idiot. Then Go-hard Andrew staggers into this guy who's just walking past.



VO: Because Go-hard Andrew has turned into such a loser, he gets it all wrong & picks a fight with this guy.

By this time Go-hard Andrew can't even talk right!



VO: Party-hard Andrew figures he's gonna hit this guy, but he's so out-of-it he swings around like a baby.

He accidentally smacks Cassie in the mouth when she tries to stop him from making an idiot of himself.



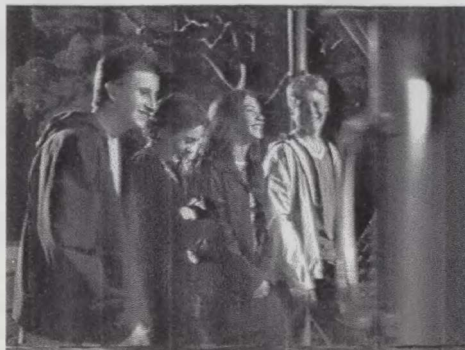
VO: Go-hard Andrew gets knocked to the ground by this guy who tells him he's a jerk. Andrew gets up to help Cassie but everyone in the street tells him to just get lost.

Male Scenario Three: Combination Threat / Positive Reinforcement



VO: Part-hard Andrew's too wiped out to even try to fix things. Cassie's been taken home, or to the hospital maybe. He's on his own.

He thinks to himself, why did I drink all that booze? I'm an idiot!



VO: Meanwhile, back with Restrained Andrew, he reckons it's your own decision whether you're going to get wasted, but it just doesn't stack up. If you do figure you're going to have a few drinks you're better to at least be a bit in control.

He thinks I've had a good night tonight & I wasn't wasted too!

As Andrew heads home with Cassie, he thinks great, no school tomorrow & I'm going to have an early morning surf. Cool!

***"How well do
your
decisions
work for you?"***

VO: How well do your decisions work for you?

Editing:

SFX: Background music throughout

SFX: Background crowd/party throughout

**Appendix 8: The order of presentation of the questions from each
questionnaire V2 and V2**

QUESTIONNAIRE RE-ORDERING

Data from Version 1 / Data from Version 2 = Complete SPSS Master File

[illegible]